FEDERAL PROJECT

BEFORE SUBMITTING YOUR BID

- 1. Use pen and ink to complete the Bid.
- 2. Have you signed and completed the Contract Agreement, Offer & Award Forms?
- 3. As a minimum, the Bidder will submit a Bid Package consisting of the Notice to Contractors, the completed Acknowledgement of Bid Amendments & Submission of Bid Bond Validation Number form, the completed Schedule of Items, 2 copies of the completed Agreement, Offer, & Award form, a Bid Bond or Bid Guarantee, and any other Certifications or Bid Requirements listed in the Bid Book.
- 4. Have you included prices for all Bid Items? ("Zero is not considered a bid price.")
- 5. Have you included a bid guarantee? Acceptable forms are:
 - A. Bid Bond on the Department's prescribed form for 5% of the Bid Amount. (Or forms that do not contain any significant variations from the Department's forms as solely determined by the Department.)
 - B. Official Bank Check, Cashier's Check, Certified Check, U.S. Postal Money Order or Negotiable Certificate of Deposit in the amount stated in the Notice to Contractors.
- 6. If the written Bid is to be sent, Federal Express overnight delivery is suggested as the package is delivered directly to the DOT Headquarters Building in Augusta. Other means, such as U.S. Postal Services' Express Mail has proven not to be reliable.

AND FOR FEDERAL AID PROJECTS

7. Have you included your DBE Proposed Utilization Form in the proper amounts, and furnished the completed form to the Contracts section by 4:30pm on bid opening day?

If you need further information regarding Bid preparation, call the DOT Contracts Section at (207)624-3410.

For complete specifications regarding bidding requirements, refer to Section 102 of the Maine Department of Transportation, Standard Specifications, Revision December 2002.

NOTICE

The Maine Department of Transportation is attempting to improve the way Bid Amendments/Addendums are handled, and allow for an electronic downloading of bid packages from our website, while continuing to maintain a planholders list.

Prospective bidders, subcontractors or suppliers who wish to download a copy of the bid package and receive a courtesy notification of project specific bid amendments, must provide an email address to Diane Barnes at the MDOT Contracts mailbox at:

MDOT.contracts@maine.gov. Each bid package will require a separate request.

Additionally, interested parties will be responsible for reviewing and retrieving the Bid Amendments from our web site, and acknowledging receipt and incorporating those Bid Amendments in their bids using the Acknowledgement of Bid Amendment Form.

The downloading of bid packages from the MDOT website is <u>not</u> the same as providing an electronic bid to the Department. Electronic bids must be submitted via http://www.BIDX.com. For information on electronic bidding contract Rebecca Pooler at rebecca.pooler@maine.gov.

NOTICE

For security and other reasons, all Bid Packages which are mailed, shall be provided in double (one envelope inside the other) envelopes. The *Inner Envelope* shall have the following information provided on it:

Bid Enclosed - Do Not Open

PIN:

Town:

Date of Bid Opening:

Name of Contractor with mailing address and telephone number:

In Addition to the usual address information, the *Outer Envelope* should have written or typed on it:

Double Envelope: Bid Enclosed

PIN:

Town:

Date of Bid Opening:

Name of Contractor:

This should not be much of a change for those of you who use Federal Express or similar services.

Hand-carried Bids may be in one envelope as before, and should be marked with the following infrormation:

Bid Enclosed: Do Not Open

PIN:

Town:

Name of Contractor:

STATE OF MAINE DEPARTMENT OF TRANSPORTATION

Bid Guaranty-Bid Bond Form

KNOW ALL MEN BY THESE PRI	ESENTS THAT	
,0	of the City/Town of	and State of
as Principal, and		as Surety, a
Corporation duly organized under the	laws of the State of	and having a usual place of
Business in	and hereby held a	nd firmly bound unto the Treasurer of
the State of Maine in the sum of		yment which Principal and Surety bind
themselves, their heirs, executers, adm		
The condition of this obligation is that	the Principal has submitted	ed to the Maine Department of
Transportation, hereafter Department,	a certain bid, attached her	reto and incorporated as a
part herein, to enter into a written cont	ract for the construction o	of
	+	
	and if the	Department shall accept said bid
and the Principal shall execute and del	liver a contract in the form	attached hereto (properly
completed in accordance with said bid) and shall furnish bonds	for this faithful performance of
said contract, and for the payment of a	all persons performing laboration	or or furnishing material in
connection therewith, and shall in all o	other respects perform the	agreement created by the
acceptance of said bid, then this obliga	ation shall be null and voice	d; otherwise it shall remain in full
force, and effect.		
Si	gned and sealed this	day of20
WITNESS:	P	PRINCIPAL:
	E	Ву
	F	Зу:
		By:
WITNESS	S	SURETY:
		Зу:
	Ν	Name of Local Agency:

NOTICE

Bidders:

Please use the attached "Request for Information" form when faxing questions and comments concerning specific Contracts that have been Advertised for Bid. Include additional numbered pages as required.

State of Maine Department of Transportation

REQUEST FOR INFORMATION

Date _		Time	
Information Requested:	PIN:	Town(s):	
Request by:Bid Date:		Phone: ()	
Complete top portion of fo	rm and transmit t	Fax: () o the number listed in the Notice	to Contractors
RFI No:	_ RFI received: _		
Response:			
			·
Response By	<u> </u>	Date:	

INSTRUCTIONS FOR PREPARING THE CONTRACTOR'S DISADVANTAGED BUSINESS ENTERPRISE UTILIZATION PLAN

The Contractor Shall:

- 1. Submit a completed <u>Contractor's Disadvantaged Business</u> <u>Enterprise Utilization Plan</u> to the Contract's Engineer by 4:30 P.M. on the Bid day.
- 2. Extend equal opportunity to MDOT certified DBE firms (as listed in MDOT's DBE Directory of Certified Businesses) in the selection and utilization of Subcontractors and Suppliers.

SPECIFIC INSTRUCTIONS FOR COMPLETING THE FORM:

Insert Contractor name, the name of the person(s) preparing the form, and that person(s) telephone and fax number.

Provide total Bid price, Federal Project Identification Number, and location of the Project work.

In the columns, name each DBE firm to be used, provide the Unit or Item cost of the Work/Product to be provided by the DBE firm, give a brief description of the Work, and the dollar value of the Work.

If no DBE firm is to be utilized, the Contractor must document the reason(s) why no DBE firms are being used. Specific supporting evidence of good faith efforts taken by Contractors to solicit DBE Bidders must be attached. This evidence, as a minimum, includes phone logs, e-mail and/or mail DBE solicitation records, and the documented results of these solicitations.

NOTICE

Disadvantaged Business Enterprise Proposed Utilization

The Apparent Low Bidder must submit the <u>Disadvantaged</u> Business Enterprise Proposed Utilization form by close of Business (4:30 P.M.) on Bid day.

The <u>Contractor's Disadvantaged Business Enterprise Proposed</u> <u>Utilization Plan</u> form contains additional information that is required by USDOT.

The <u>Contractor's Disadvantaged Business Enterprise Proposed</u> <u>Utilization Plan</u> form must be used.

A copy of the new <u>Contractor's Disadvantaged Business</u> <u>Enterprise Proposed Utilization Plan</u> and instructions for completing it are attached.

Note: Questions about DBE firms, or to obtain a printed copy of the DBE Directory, contact Equal Opportunity at (207) 624-3066.

MDOTs DBE Directory of Certified firms can also be obtained at http://www.state.me.us/mdot/humnres/o_equalo/cdwbed_h.htm

NOTICE

Maine Department of Transportation Disadvantaged Business Enterprise Program

Notice is hereby given that in accordance with US DOT regulation 49 CFR Part 26, the Maine Department of Transportation has established a DBE Program for disadvantaged business participation in the federal-aid construction program; MaineDOT contracts covered by the program include consulting, construction, supplies, manufacturing, and service contracts.

For FFY 2005 (October 1, 2004 through September 30, 2005), MaineDOT has established a DBE participation goal of 10.73% to be achieved through race/gender neutral means.

Interested parties may view MDOT's DBE goal setting methodology for the next 30 days during normal business hours (8-4, M-F) at the Maine Department of Transportation, Office of Human Resources, 16 State House Station, Augusta ME 04333-0016. Appointments may be scheduled by telephone at (207) 624-3066. The goal setting methodology is also available for viewing on the MaineDOT website: http://www.maine.gov/mdot/disadvantaged-business-enterprises/dbe-home.php.

Comments on the goal will be accepted for 45 days from the date of this notice. Written comments should be addressed to Christy Cross, Equal Employment Opportunity Coordinator, Maine Department of Transportation, Office of Human Resources, 16 State House Station, Augusta, Maine 04333-0016 or by e-mail at: christy.cross@maine.gov.

		MainaDOT CONTR	ACTOR'S DISADVANT	TACED RUSIN	FSS FNTFDPDIS	F
		Maniebol Colvin	PROPOSED UTILIZA		ESS ENTERING	L
		Low Bidder mu	st furnish this form to Con	tracts Section Bio	l Opening day.	
C	ontrac	tor:		_ Telepho	one:	
Pı	Prepared by:			_ Fax:		
Bl	D PRI	CE: \$	BID DATE:			
FI	EDERA	LL PIN #	PROJEC	CT LOCATION: _		
		TOTAL DBE	_ % PARTICIPATION FOR	THIS PROJECT		
W B E•	D B E•	Firm Name	Unit/Item Cost	Unit #	Description of Work & Item Number	Actual \$ Value
					Total >	
		upporting evidence to the maxiclude name of firm(s) contacted				nt. This evidence
I	Equal	Opportunity Use:				
I	Form r	received:// Verifie	d by:		_	
		Accepted Rejecte				
		Contracts Other				

Page ___ of ___

- WBEs are non-minority women owned firms certified by MaineDOT
- DBEs are male and minority owned firms certified by MaineDOT

For a complete list of certified firms go to http://www.maine.gov/mdot

_ Original Submission

State of Maine

VENDOR FORM

For New Vendors & for Updates on Current Vendors

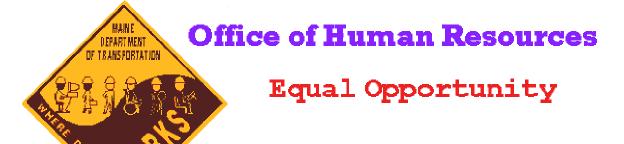
Special Instructions:	_	Return th	nis form to:	
PLEASE PRINT CLEARLY				
* = MUST BE COMPLETED TO PROCESS	_	ONL	Y ONE NAME/VENDOR PE	R FORM
Address New Vendor Change Multi Address	s	Name Change	Contact Update	ID # Change
Social Security Number* Individual or Sole Proprietor	<u>OR</u>		Federal Taxpayer ID Nu Corporation	ımber*
S Pleas	se fill in	ONE.	E	
Business name in "DBA" field below.			Business name in "Name" field below	
This form will affect all t	tuansaatian	s with ATT	stata aganaias	
NEW:*	<u>transactions</u>	OLD:	state agencies.	
Remit to Address: Individual or Business Name.		Old number:		
Name*	7	Name		
DBA or C/O	=	DBA or C/O		
	=			
Address*	=	Address		
	_			
	=			
Tel #*		Tel#		
Is this the same name on your Social Security card?		Acct #	<u>E</u>	
If not, have you told Social Security about your name	change?	Provider #		
Signature*		Contact Nan	ne	
Print Name or Title	_	Accounts Re	eceivable Contact Name	
Date* (within 3 months)	_	Phone # if D	ifferent or for Contact Info	
Vendor Indicators: Enter Y (Yes) For A	All Categories	Listed Below	That Apply To This Vendor	
			_	
Dealer: Jobber:	Manufacturer Retailer		Factory R Commod	
Individual:	Partnership		Incorporat	
Minority: S	mall Business	:	In-St	ate:
Information on State	e Agency Su	bmitting Ve	ndor Form	
State Agency* & SHS # Contact	t Person Name	& Title*	Telephon	e #*

INSTRUCTIONS FOR COMPLETING VENDOR FORM

- 1. Print Clearly
- 2. All sections marked with an * must be completed for processing
- 3. Send completed form to requesting State agency OR remit to address at bottom of form.
- 4. Do NOT send by Fax. Only originals will be accepted.

FIELDS	INFORMATION NEEDED FOR FIELD
Instructi	
ons	Instructions to Vendor from Agency requesting information.
	The location of agency where the form is to be mailed back to. If none use address at
Return to	bottom of form.
Boxes	Please check mark all that apply to the vendor. If other, please specify.
above	If it's a new vendor only one will apply: "New Vendor"
Social	Individuals, individuals "doing business as", and individuals without a Federal
Security	Taxpayer ID #. Use if not using EIN
Federal	Businesses or professionals providing services.
Taxpayer	(ID # needs to be use for REMITTANCE purposes.) Use if not using SSN
New	Current Information
Old	Old information (If another ID# had been used please put it next to "OLD")
Name	Individual's Name or Business Name. ONLY ONE name per a form.
-	
DBA or C	"Doing business as" or "In Care Of"
Address	REMITTANCE ADDRESS - Street Address OR PO Box (one or the other)
Tel#	Phone Number of individual or business
-	
	Individual or authorized representative of individual or authorized representative of
Signature	the business
Date	Current Date (no more than 3 months old)
	, , , , , , , , , , , , , , , , , , ,
Contact N	Contact person at business
	•

Accounts	
Receivab	
le	
Contact	
Name	Contact person at business for accounts receivables.
Phone #	Phone for Act Rec Contact
Vendor	
Indicator	
S	Indicate all that apply for the vendor, as needed



MAINE DEPARTMENT OF TRANSPORTATION

Certified Disadvantaged and Women Business Enterprise

DBE DIRECTORY - MINORITY OWNED

WBE DIRECTORY - WOMEN OWNED

WEBSITE FOR DIRECTORY CAN BE FOUND AT: http://www.state.me.us/mdot/humnres/o equalo/cdwbed h.htm

It is the responsibility of the Contractor to access the DBE Directory at this site in order to have the most current listings.

STATE OF MAINE DEPARTMENT OF TRANSPORTATION NOTICE TO CONTRACTORS

Sealed Bids addressed to the Maine Department of Transportation, Augusta, Maine 04333 and endorsed on the wrapper "Bids for Moose River Bridge in the town of <u>Jackman</u>" will be received from contractors at the Reception Desk, Maine DOT Building, Child Street, Augusta, Maine, until 11:00 o'clock A.M. (prevailing time) on <u>December 15, 2004</u>, and at that time and place publicly opened and read. Bids will be accepted from contractors prequalified by the Department of Transportation for <u>Bridge Projects</u>. All other Bids may be rejected. We now accept electronic bids for those bid packages posted on the bidx.com website. Electronic bids do not have to be accompanied by paper bids. <u>Please note: the Department will accept a facsimile of the bid bond; however, the original bid bond must then be received at the MDOT Contract Section within 72 hours of the bid opening. Until further notice,, dual bids (one paper, one electronic) will be accepted, with the paper copy taking precedence.</u>

Description: Maine Federal Aid Project No. NH-1010(600)E, PIN 10106.00

Location: In Somerset County, project is located on route 201 at the Moose River Bridge over Moose River 1.70 miles northerly of the intersection of route 201 and routes 6 and 15.

Outline of Work: 8400M3 earth and approach work, 2000 MG, 970 M H-piles, 55M pipe piles, 495 M3 structural concrete, 83700 KG structural steel (welded), 2010 shear connectors and other incidental work.

For general information regarding Bidding and Contracting procedures, contact Scott Bickford at (207)624-3410. Our webpage at http://www.state.me.us/mdot/project/design/homepg.htm contains a copy of the schedule of items, Plan Holders List, written portions of bid amendments (not drawings), and bid results. For Project-specific information fax all questions to **Project Manager Wayne Frankhauser** at (207)624-3431. Questions received after 12:00 noon of Monday prior to bid date will not be answered. Bidders shall not contact any other Departmental staff for clarification of Contract provisions, and the Department will not be responsible for any interpretations so obtained. Hearing impaired persons may call the Telecommunication Device for the Deaf at (207)624-3007.

Plans, specifications and bid forms may be seen at the Maine DOT Building in Augusta, Maine and at the Department of Transportation's Division Office in Region 3 Western Region. They may be purchased from the Department between the hours of 8:00 a.m. to 4:30 p.m. by cash, credit card (Visa/Mastercard) or check payable to Treasurer, State of Maine sent to Maine Department of Transportation, Attn.: Mailroom, 16 State House Station, Augusta, Maine 04333-0016. They also may be purchased by telephone at (207) 624-3536 between the hours of 8:00 a.m. to 4:30 p.m. Full size plans \$53.00 (\$57.50 by mail). Half size plans \$26.50 (\$29.50 by mail), Bid Book \$10 (\$13 by mail), Single Sheets \$2, payment in advance, all non-refundable.

Each Bid must be made upon blank forms provided by the Department and must be accompanied by a bid bond at 5% of the bid amount or an official bank check, cashier's check, certified check, certificate of deposit, or United States postal money order in the amount of \$80,000.00 payable to Treasurer, State of Maine as a Bid guarantee. A Contract Performance Surety Bond and a Contract Payment Surety Bond, each in the amount of 100 percent of the Contract price, will be required of the successful Bidder.

This Contract is subject to all applicable Federal Laws. This contract is subject to compliance with the Disadvantaged Business Enterprise program requirements as set forth by the Maine Department of Transportation.

All work shall be governed by "State of Maine, Department of Transportation, Standard Specifications, Revision of December 2002", price \$10 [\$13 by mail], and Standard Details, Revision of December 2002, price \$20 [\$25 by mail]. Standard Detail updates can be found at http://www.state.me.us/mdot/project/design/homepg.htm

The right is hereby reserved to the MDOT to reject any or all bids.

Augusta, Maine November 24, 2004



JOHN E. DORITY CHIEF ENGINEER

JACKMAN 10106.00 August 3, 2004 Supercedes March 17, 2004

SPECIAL PROVISION 102.7.3 ACKNOWLEDGMENT OF BID AMENDMENTS

With this form, the Bidder acknowledges its responsibility to check for all Amendments to the Bid Package. For each Project under Advertisement, Amendments are located at http://www.maine.gov/mdot/comprehensive-list-projects/project-information.php It is the responsibility of the Bidder to determine if there are Amendments to the Project, to download them, to incorporate them into their Bid Package, and to reference the Amendment number and the date on the form below. The Maine DOT will not post Bid Amendments any later than noon the day before Bid opening without individually notifying all the planholders.

Amendment Number	Date

The Contractor, for itself, its successors and assigns, hereby acknowledges that it has received all of the above referenced Amendments to the Bid Package.

	CONTRACTOR
Date	Signature of authorized representative
	(Name and Title Printed)

BID

DATE OF OPENING : CALL ORDER :

CONTRACT ID : 010106.00

PROJECTS

NH-1010(600)E 10516.50

COUNTY : SOMERSET

PAGE:

REVISED:

DATE: 041119

SCHEDULE OF ITEMS

CONTRACT ID: 010106.00 PROJECT(S): NH-1010(600)E 10516.50

CONTRACTOR : _____ | AND UNITS | DOLLARS | CTS | DOLLARS | CTS SECTION 0001 BRIDGE ITEMS |201.23 REMOVING SINGLE | i 2.000| 0010|TREE TOP ONLY |EA 0020| |EA |202.08 REMOVING BUILDING | |LUMP |LUMP 0030|NO.: 1 |202.08 REMOVING BUILDING | 00401NO.: 2 LUMP | LUMP |202.19 REMOVING EXISTING | |LUMP | 0050|BRIDGE | LUMP |203.20 COMMON EXCAVATION | 2700.000 00601 |M3 |203.2312 HEALTH AND 0070|SAFETY PLAN | LUMP | LUMP 1 1203.2333 DISPOSAL OF ı 10.000 0080|SPECIAL EXCAVATION ' |MG | |203.24 COMMON BORROW i 0090| 10.000| |**M**3 0100| |M3

REVISED:

CONTRACT ID: 010106.00 PROJECT(S): NH-1010(600)E

LINE	ITEM DESCRIPTION	APPROX. QUANTITY	UNIT	PRICE	BID AN	TOUNT
I I	DESCRIPTION	-	DOLLARS	CTS	DOLLARS	CT
0110	206.082 STRUCTURAL EARTH EXCAVATION - MAJOR STRUCTURES	 730.000 M3	 	 	 	
	304.10 AGGREGATE SUBBASE COURSE - GRAVEL 	 4800.000 M3	 	 	 	
	403.207 HOT MIX ASPHALT 19.0 MM NOMINAL MAX SIZE 	•	 	 	 	
	403.208 HOT MIX ASPHALT 12.5 MM, SURFACE	 1200.000 MG	 		 	
0150	403.209 HOT MIX ASPHALT 9.5 MM(SIDEWALKS,DRIVES, INCIDENTAL)	 120.000 MG	 	 	 	
	403.210 HOT MIX ASPHALT 9.5 MM NOMINAL MAX SIZE 	•	 	 	 	
	409.15 BITUMINOUS TACK COAT APPLIED	 1200.000 L	 	 	 	
	501.231 DYNAMIC LOADING TEST 	 3.000 EA	 	 	 	
0190	501.50 STEEL H-BEAM PILES 132 KG/M, DELIVERED	 470.000 M	 	 	 	
	501.501 STEEL H-BEAM PILES 132 KG/M, IN PLACE 	 420.000 M	 	 	 	
	501.70 STEEL PIPE PILES, DELIVERED	 55.000	 	 	 	

REVISED:

CONTRACT ID: 010106.00 PROJECT(S): NH-1010(600)E

LINE	ITEM	APPROX.	 I	UNIT	PRICE	BID A	MOUNT
-	DESCRIPTION	QUANTITY AND UNITS	-			DOLLARS	
	501.701 STEEL PIPE PILES, IN PLACE		5.000	 	 	 	
0230 0230	501.90 PILE TIPS	 24 EA	.000	 	 	 	
0240 0240	501.91 PILE SPLICES	 34 EA	.000	 	 	 	
	501.92 PILE DRIVING EQUIPMENT MOBILIZATION	 LUMP 		 LUMP 	 	 	
0260	502.219 STRUCTURAL CONCRETE, ABUTMENTS AND RETAINING WALLS	 LUMP 		 LUMP 	 	 	
	502.239 STRUCTURAL CONCRETE PIERS	 LUMP 		 LUMP 	 	 	
0280 j	502.26 STRUCTURAL CONCRETE ROADWAY AND SIDEWALK SLABS ON STEEL BRIDGES	 LUMP 		 LUMP 	 	 	
	502.31 STRUCTURAL CONCRETE APPROACH SLABS	•		 LUMP 	 	 	
0300	502.49 STRUCTURAL CONCRETE CURBS AND SIDEWALKS	 LUMP		 LUMP 	 	 	
	503.12 REINFORCING STEEL,	•	0.000	 	 	 	

REVISED:

CONTRACT ID: 010106.00 PROJECT(S): NH-1010(600)E

LINE	•	APPROX. QUANTITY -		UNIT PRICE			BID AMOUNT		
NO 	-	QUANT: AND UI					 DOLLARS	CTS	
	503.13 REINFORCING STEEL, PLACING 		6000.000	 		 	 	 	
0330	504.702 STRUCTURAL STEEL FABRICATED AND DELIVERED, WELDED	•		 LUMP 		 	 	 	
	504.71 STRUCTURAL STEEL ERECTION 	 LUMP 		 LUMP 		 	 	 	
0350	505.08 SHEAR CONNECTORS 	 LUMP 		 LUMP 		 	 	 	
	508.14 HIGH PERFORMANCE WATERPROOFING MEMBRANE 	 LUMP 		 LUMP 		 	 	 	
0370	510.12 SPECIAL DETOUR(M) ROADWAY WIDTH, VEHICULAR AND PEDESTRIAN SEPERATED	 LUMP 		 LUMP 		 	 	 	
	511.07 COFFERDAM: ABUTMENT NO. 1 	 LUMP 		 LUMP 		 	 	 	
	511.07 COFFERDAM: ABUTMENT NO. 2 	 LUMP 		 LUMP 		 	 	 	
	514.06 CURING BOX FOR CONCRETE CYLINDERS	 EA	1.000	 		 	 	 	
0410	515.20 PROTECTIVE COATING FOR CONCRETE SURFACES	 M2	660.000	 		 	 	 	

REVISED:

CONTRACT ID: 010106.00 PROJECT(S): NH-1010(600)E

•	-	APPROX.			BID AMOUNT		
NO	·	QUANTITY - AND UNITS	DOLLARS		DOLLARS	CTS	
	523.52 BEARING INSTALLATION	 5.000 EA	 	 	 	 	
0430	523.5401 LAMINATED ELASTOMERIC BEARINGS, FIXED	 5.000 EA	 	 	 	 	
 0440 	526.323 TEXAS CLASSIC RAIL	 LUMP	 LUMP 	 	 	 	
 0 4 50	603.175 450 MM RCP CLASS	 12.000 M	 	 	 	 	
-	603.179 450 MM CULVERT PIPE OPTION III	 52.000 M	 	 	 	 	
 0470 	604.072 CATCH BASIN TYPE A1-C	 13.250 EA	 	 	 	 	
-	605.11 300 MM UNDERDRAIN TYPE C	 550.000 M	 	 	 	 	
-	606.15 GUARDRAIL TYPE 3A - SINGLE RAIL	 55.000 M	 	 	 	 	
	606.1721 BRIDGE TRANSITION - TYPE 1	 4.000 EA	 	 	 	 	
-	606.20 GUARDRAIL TYPE 3A - OVER 4.5 M RADIUS	 8.000 M	 	 	 	 	

REVISED:

CONTRACT ID: 010106.00 PROJECT(S): NH-1010(600)E

LINE		APPROX.	•		PRI	CE	BID A	MOUNT
NO	DESCRIPTION	QUANTITY AND UNITS		DOLLARS		CTS	DOLLARS	CT
0520	606.265 TERMINAL END - SINGLE RAIL - GALVANIZED STEEL	 1 EA	.000	 		 	 	
	606.35 GUARDRAIL DELINEATOR POST 	 4 EA	.000	 		 	 	
	606.79 GUARDRAIL 350 FLARED TERMINAL 	 2 EA	.000	 		 	 	
0550	607.22 CEDAR RAIL FENCE 	 50 M	.000	 		 	 	
	608.26 CURB RAMP DETECTABLE WARNING FIELD 	 16 M2	.000	 		 	 	
	609.11 VERTICAL CURB TYPE 1 	 390 M	.000	 		 	 	
	609.12 VERTICAL CURB TYPE 1 - CIRCULAR 	 80 M	.000	 		 	 	
	609.13 VERTICAL BRIDGE CURB TYPE 1 	 122 M	.000	 		 	 	
	609.234 TERMINAL CURB TYPE 1 - 1.2 METER 	 7 EA	.000	 		 	 	
	609.237 TERMINAL CURB TYPE 1 - 2.1 METER 	 21 EA	.000	 		 	 	
0620	609.31 CURB TYPE 3 	 10 M	.000	 		 	 	

REVISED:

CONTRACT ID: 010106.00 PROJECT(S): NH-1010(600)E

LINE		APPROX.	•			BID A	MOUNT
NO 	DESCRIPTION	QUANTITY AND UNITS		DOLLARS		DOLLARS	CT
	609.50 CONCRETE BASE FOR CURBING 	 420 M	.000	 	 		
0640	 610.08 PLAIN RIPRAP 	 650 M3	.000	 	 	 	
	613.319 EROSION CONTROL BLANKET	•	.000	 	 	 	
0660	615.07	 45 M3	.000	 	 	 	
	618.1301 SEEDING METHOD NUMBER 1 - PLAN QUANTITY 	•	.000	 	 	 	
	619.1201 MULCH - PLAN QUANTITY 	 9 UN	.000	 	 	 	
0690	619.1401 EROSION CONTROL MIX		. 000	 	 	 	
0700	621.032 EVERGREEN TREES (1200 MM - 1500 MM) GROUP B	 9 EA	.000	 	 	 	
0710	621.12 SMALL DECIDUOUS TREES (1500 MM - 1800 MM) GROUP A	 5 EA	. 000	 	 	 	
0720	621.249		.000	 	 	 	

PAGE:

REVISED:

DATE: 041119

SCHEDULE OF ITEMS

CONTRACT ID: 010106.00 PROJECT(S): NH-1010(600)E 10516.50

CONTRACTOR : _____ | APPROX. | QUANTITY | UNIT PRICE | BID AMOUNT NO | DESCRIPTION |-----| AND UNITS | DOLLARS | CTS | DOLLARS | CTS |621.54 DECIDUOUS SHRUBS | 0730|(450 MM - 600 MM) GROUP | 24.000| |A | EA | |EA |621.80 ESTABLISHMENT LUMP | LUMP 0740|PERIOD |626.22 NON-METALLIC 0750|CONDUIT |M |627.711 WHITE OR YELLOW | 0760|PAINTED PAVEMENT MARKING | 1020.000| |LINE (PLAN QUANTITY) |M |627.76 TEMPORARY 0770|PAVEMENT MARKING LINE, |LUMP LUMP |WHITE OR YELLOW |627.77 REMOVING PAVEMENT | 0780|MARKINGS 10.000| 1 | M2 - 1]] 1629.05 HAND LABOR, 0790|STRAIGHT TIME 80.000| |HR |631.12 ALL PURPOSE 40.000 0800|EXCAVATOR (INCLUDING |OPERATOR) |HR |631.15 ROLLER, EARTH AND | 40.000 0810|BASE COURSE (INCLUDING | OPERATOR) |631.172 TRUCK - LARGE 0820 | (INCLUDING OPERATOR) 1 40.000| - 1 |HR |634.16 HIGHWAY LIGHTING | | LUMP | LUMP 08301 1

REVISED:

CONTRACT ID: 010106.00 PROJECT(S): NH-1010(600)E

INE	ITEM	APPROX.		CE	BID AM	OUNT
ON	DESCRIPTION	QUANTITY - AND UNITS		- CTS	DOLLARS	CT
0840	635.14 PREFABRICATED CONCRETE MODULAR GRAVITY WALL	 100.000 M2	 	 	 	
	638.01 EMBEDDED WORK IN STRUCTURES	•	 LUMP 	 	 	
0860	639.18 FIELD OFFICE TYPE A 	 1.000 EA	 	 	 	
0870	652.31 TYPE I BARRICADE 	 6.000 EA	 	 	 	
	652.312 TYPE III BARRICADE 	 6.000 EA	 	 	 	
0890	 652.33 DRUM 	 20.000 EA	 	 	 	
0900	652.34 CONE 	 40.000 EA	 	 	 	
	652.35 CONSTRUCTION SIGNS	 50.000 M2	 	 	 	
	652.361 MAINTENANCE OF TRAFFIC CONTROL DEVICES	 LUMP 	 LUMP 	 	 	
0930	 652.38 FLAGGER 		 	 	 	

SCHEDULE OF ITEMS REVISED:

CONTRACT ID: 010106.00 PROJECT(S): NH-1010(600)E

LINE	-		PROX.	١	UNIT PE	RIC	CE .	BID A	TUUOM
NO	DESCRIPTION	QUAN AND	UNITS	1	DOLLARS	 I	 CTS	DOLLARS	CT
0940	656.75 TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	 LUMP 			 LUMP 	 	 	 	
0950	659.101 MOBILIZATION 	 LUMP 			 LUMP 	 		 	
	660.21 ON-THE-JOB TRAINING (BID) 	 HR	1000.	000	 	 	 		
0970	822.3256 200 MM TS&V BOX 	 EA	2.	000	 	 	 		
	822.34 200 MM CLASS 52 DI PIPE 	 M	40.	000	 	 	 	 	
	823.3254 200 MM INSERTION VALVE 	 EA	2.	000	 	 	 	 	
	825.311 19 MM CORPORATION 	 EA	1.	000	 	 	 	 	
1010	825.312 19 MM CURB STOP 	 EA	1.	000	 	 	 		
	825.41 19 MM COPPER SERVICE 	 M	10.	000	 	 		 	
1030	827.3211 RESTRAINING EXISTING 200 MM PUSH -ON JOINTS	 EA	6.	000	 	 		 	
1040	827.33 TRENCH INSULATION	 M	50.	000	 	 	 	 	

MAINE DEPARTMENT OF TRANSPORTATION PAGE: 11 DATE: 041119

SCHEDULE OF ITEMS

REVISED:

CONTRACT ID: 010106.00 PROJECT(S): NH-1010(600)E

LINE NO	ITEM DESCRIPTION	l I	APPROX.	 -	UNIT I	PRICE	BID AM	OUNT
	22001122201	i	AND UNITS	i	DOLLARS	CTS	DOLLARS	CTS
83	30.20 250 MM HDPE BY				 	I	 	·
1050 HC	DRIZ. DIRECTIONAL	- 1	83.	000	1	1	I	1
DI 	RILLING 	M 	1 		l 	 	 	 :
83	35.15 BOAT RAMP	1			I	1	1	ı
1060		ļΙ	LUMP		LUMP	1	1	1
I		l			l 	 	 	
1					I			1
5	SECTION 0001 TOTAL				1			<u> </u>
I					 I			
7	TOTAL BID				1			1

CONTRACT AGREEMENT, OFFER & AWARD

AGREEMENT made on the date last signed below, by and between the State of Maine, acting through and by its Department of Transportation (Department), an agency of state government with its principal administrative offices located at Child Street, Augusta, Maine, with a mailing address at 16 State House Station, Augusta, Maine 04333-0016, and

a corporation or other legal entity or	ganized	under	the	laws	of the	State	of Maine,	with it
principal place of business located at								

The Department and the Contractor, in consideration of the mutual promises set forth in this Agreement (the "Contract"), hereby agree as follows:

A. The Work.

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, PIN No. <u>10106.00</u>

, for the <u>BRIDGE REPLACEMENT</u> in the town of <u>JACKMAN</u>, County of <u>SOMERSET</u>, Maine. The Work includes construction, maintenance during construction, warranty as provided in the Contract, and other incidental work.

The Contractor shall be responsible for furnishing all supervision, labor, equipment, tools supplies, permanent materials and temporary materials required to perform the Work including construction quality control including inspection, testing and documentation, all required documentation at the conclusion of the project, warranting its work and performing all other work indicated in the Contract.

The Department shall have the right to alter the nature and extent of the Work as provided in the Contract; payment to be made as provided in the same.

B. Time.

The Contractor agrees to complete all Work, except warranty work, on or before **August 4 2006.** Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of Maine Department of Transportation Standard Specifications, Revision of December 2002.

C. Price.

<u>\$</u>	Performance	Bond and	Payment	Bond	each	being
of this offer is _						
the required Per	formance Surety Bond and Pay	ment Surety	y Bond, ar	nd that	the ar	noun
basis for detern	ining the original Contract amo	ount and for	determini	ng the	amou	nts of
1 '	given in the Schedule of Items					

D. Contract.

100% of the amount of this Contract.

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, Standard Specifications, Revision of December 2002, Standard Details Revision of December 2002 as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

E. Certifications.

By signing below, the Contractor hereby certifies that to the best of the Contractor's knowledge and belief:

- 1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in Appendix A to Division 100 of the Standard Specifications Revision of December 2002 (Federal Contract Provisions Supplement), and the Contract are still complete and accurate as of the date of this Agreement.
- 2. The Contractor knows of no legal, contractual, or financial impediment to entering into this Contract.
- 3. The person signing below is legally authorized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the terms of the Contract.

F. Offer.

The undersigned, having carefully examined the site of work, the Plans, Standard Specifications Revision of December 2002, Standard Details Revision of December 2002 as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of:

PIN 10106.00 JACKMAN, BRIDGE REPLACEMENT,

State of Maine, on which bids will be received until the time specified in the "Notice to Contractors" do(es) hereby bid and offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict accordance with the terms and conditions of this Contract at the unit prices in the attached "Schedule of Items".

The Offeror agrees to perform the work required at the price specified above and in accordance with the bids provided in the attached "Schedule of Items" in strict accordance with the terms of this solicitation, and to provide the appropriate insurance and bonds if this offer is accepted by the Government in writing.

As Offeror also agrees:

First: To do any extra work, not covered by the attached "Schedule of Items", which may be ordered by the Resident, and to accept as full compensation the amount determined upon a "Force Account" basis as provided in the Standard Specifications, Revision of December 2002, and as addressed in the contract documents.

Second: That the bid bond at 5% of the bid amount or the official bank check, cashier's check, certificate of deposit or U. S. Postal Money Order in the amount given in the "Notice to Contractors", payable to the Treasurer of the State of Maine and accompanying this bid, shall be forfeited, as liquidated damages, if in case this bid is accepted, and the undersigned shall fail to abide by the terms and conditions of the offer and fail to furnish satisfactory insurance and Contract bonds under the conditions stipulated in the Specifications within 15 days of notice of intent to award the contract.

Third: To begin the Work on the date specified in the Engineer's "Notice to Commence Work" as stated in Section 107.2 of the Standard Specifications Revision of December 2002 and complete the Work within the time limits given in the Special Provisions of this Contract.

Fourth: The Contractor will be bound to the Disadvantaged Business Enterprise (DBE) Requirements contained in the attached Notice (Additional Instructions to Bidders) and submit a completed Contractor's Disadvantaged Business Enterprise Utilization Plan by 4:30pm on the day of bid opening to the Contracts Engineer.

Fifth: That this offer shall remain open for 30 calendar days after the date of opening of bids.

Sixth: The Bidder hereby certifies, to the best of its knowledge and belief that: the Bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of competitive bidding in connection with its bid, and its subsequent contract with the Department.

IN WITNESS WHEREOF, the Contractor, for itself, its successors and assigns, hereby execute two duplicate originals of this Agreement and thereby binds itself to all covenants, terms, and obligations contained in the Contract Documents.

		CONTRACTOR
	Date Witness Award. Your offer is hereby accepted. documents referenced herein.	(Signature of Legally Authorized Representative of the Contractor)
	Witness	(Name and Title Printed)
G.		
		This award consummates the Contract, and the
		MAINE DEPARTMENT OF TRANSPORTATION
	Date	By: David A. Cole, Commissioner
	Witness	

CONTRACT AGREEMENT, OFFER & AWARD

AGREEMENT made on the date last signed below, by and between the State of Maine, acting through and by its Department of Transportation (Department), an agency of state government with its principal administrative offices located at Child Street, Augusta, Maine, with a mailing address at 16 State House Station, Augusta, Maine 04333-0016, and

a corporation or other legal entity or	ganized	under	the	laws	of the	State	of Maine,	with it
principal place of business located at								

The Department and the Contractor, in consideration of the mutual promises set forth in this Agreement (the "Contract"), hereby agree as follows:

A. The Work.

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, PIN No. <u>10106.00</u>

, for the <u>BRIDGE REPLACEMENT</u> in the town of <u>JACKMAN</u>, County of <u>SOMERSET</u>, Maine. The Work includes construction, maintenance during construction, warranty as provided in the Contract, and other incidental work.

The Contractor shall be responsible for furnishing all supervision, labor, equipment, tools supplies, permanent materials and temporary materials required to perform the Work including construction quality control including inspection, testing and documentation, all required documentation at the conclusion of the project, warranting its work and performing all other work indicated in the Contract.

The Department shall have the right to alter the nature and extent of the Work as provided in the Contract; payment to be made as provided in the same.

B. Time.

The Contractor agrees to complete all Work, except warranty work, on or before **August 4 2006.** Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of Maine Department of Transportation Standard Specifications, Revision of December 2002.

C. Price.

<u>\$</u>	Performance	Bond and	Payment	Bond	each	being
of this offer is _						
the required Per	formance Surety Bond and Pay	ment Surety	y Bond, ar	nd that	the ar	noun
basis for detern	ining the original Contract amo	ount and for	determini	ng the	amou	nts of
1 '	given in the Schedule of Items					

D. Contract.

100% of the amount of this Contract.

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, Standard Specifications, Revision of December 2002, Standard Details Revision of December 2002 as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

E. Certifications.

By signing below, the Contractor hereby certifies that to the best of the Contractor's knowledge and belief:

- 1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in Appendix A to Division 100 of the Standard Specifications Revision of December 2002 (Federal Contract Provisions Supplement), and the Contract are still complete and accurate as of the date of this Agreement.
- 2. The Contractor knows of no legal, contractual, or financial impediment to entering into this Contract.
- 3. The person signing below is legally authorized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the terms of the Contract.

F. Offer.

The undersigned, having carefully examined the site of work, the Plans, Standard Specifications Revision of December 2002, Standard Details Revision of December 2002 as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of:

PIN 10106.00 JACKMAN, BRIDGE REPLACEMENT,

State of Maine, on which bids will be received until the time specified in the "Notice to Contractors" do(es) hereby bid and offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict accordance with the terms and conditions of this Contract at the unit prices in the attached "Schedule of Items".

The Offeror agrees to perform the work required at the price specified above and in accordance with the bids provided in the attached "Schedule of Items" in strict accordance with the terms of this solicitation, and to provide the appropriate insurance and bonds if this offer is accepted by the Government in writing.

As Offeror also agrees:

First: To do any extra work, not covered by the attached "Schedule of Items", which may be ordered by the Resident, and to accept as full compensation the amount determined upon a "Force Account" basis as provided in the Standard Specifications, Revision of December 2002, and as addressed in the contract documents.

Second: That the bid bond at 5% of the bid amount or the official bank check, cashier's check, certificate of deposit or U. S. Postal Money Order in the amount given in the "Notice to Contractors", payable to the Treasurer of the State of Maine and accompanying this bid, shall be forfeited, as liquidated damages, if in case this bid is accepted, and the undersigned shall fail to abide by the terms and conditions of the offer and fail to furnish satisfactory insurance and Contract bonds under the conditions stipulated in the Specifications within 15 days of notice of intent to award the contract.

Third: To begin the Work on the date specified in the Engineer's "Notice to Commence Work" as stated in Section 107.2 of the Standard Specifications Revision of December 2002 and complete the Work within the time limits given in the Special Provisions of this Contract.

Fourth: The Contractor will be bound to the Disadvantaged Business Enterprise (DBE) Requirements contained in the attached Notice (Additional Instructions to Bidders) and submit a completed Contractor's Disadvantaged Business Enterprise Utilization Plan by 4:30pm on the day of bid opening to the Contracts Engineer.

Fifth: That this offer shall remain open for 30 calendar days after the date of opening of bids.

Sixth: The Bidder hereby certifies, to the best of its knowledge and belief that: the Bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of competitive bidding in connection with its bid, and its subsequent contract with the Department.

IN WITNESS WHEREOF, the Contractor, for itself, its successors and assigns, hereby execute two duplicate originals of this Agreement and thereby binds itself to all covenants, terms, and obligations contained in the Contract Documents.

		CONTRACTOR	
Date		(Signature of Legally Authorized Representative of the Contractor)	
	Witness	(Name and Title Printed)	
G.	Award.		
	Your offer is hereby accepted. documents referenced herein.	This award consummates the Contract, and the	
		MAINE DEPARTMENT OF TRANSPORTATION	
	Date	By: David A. Cole, Commissioner	
	Witness		

CONTRACT AGREEMENT, OFFER & AWARD

AGREEMENT made on the date last signed below, by and between the State of Maine,
acting through and by its Department of Transportation (Department), an agency of state
government with its principal administrative offices located at Child Street Augusta, Maine,
with a mailing address at 16 State House Station, Augusta, Maine 04333-0016, and
(Name of the firm bidding the job)
a corporation or other legal entity organized under the laws of the State of Maine, with its
principal place of business located at(address of the firm bidding the job)
The Department and the Contractor, in consideration of the mutual promises set forth in this
Agreement (the "Contract"), hereby agree as follows:
A. The Work.
A. The Work.
The Contractor agrees to complete all Work as specified or indicated in the Contract
\including Extra Work in conformity with the Contract, PIN Vo. 1224.00
, for
the Hot Mix Asphalt Overlay in the
town city of, County of
Washington Maine. The Work includes construction, maintenance during
construction, wairanty as provided in the Contract, and other incidental work.
The Contractor shall be responsible for furnishing all supervision, labor, equipment,

The Contractor shall be responsible for furnishing all supervision, labor, equipment, tools supplies, permanent materials and temporary materials required to perform the Work including construction quality control including inspection, testing and documentation, all required documentation at the conclusion of the project, warranting its work and performing all other work indicated in the Contract.

The Department shall have the right to alter the nature and extent of the Work as provided in the Contract; payment to be made as provided in the same.

B. Time.

The Contractor agrees to complete all Work, except warranty work, on or before November 15, 2003. Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of Maine Department of Transportation Standard Specifications, Revision of December 2002.

C. Price.

The quantities given in the Schedule of Items of the Bid Package will be used as the basis for determining the original Contract amount and for determining the amounts of the required Performance Surety Bond and Payment Surety Bond, and that the amount of this offer is ____(Place bid here in alphabetical form such as One Hundred and

Two dollars and 10 cents)
\$ (repeat bid here in numerical terms, such as \$102.10)

Performance

Bond and Payment Bond each being 100% of the amount of this Contract.

D. Contract.

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, Standard Specifications, Revision of December 2002, Standard Details Revision of December 2002, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

E. Certifications.

By signing below, the Contractor hereby certifies that to the best of the Contractor's knowledge and belief:

- 1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in Appendix A to Division 100 of the Standard Specifications Revision of December 2002 (Federal Contract Provisions Supplement), and the Contract are still complete and accurate as of the date of this Agreement.
- 2. The Contractor knows of no legal, contractual, or financial impediment to entering into this Contract.
- 3. The person signing below is legally authorized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the terms of the Contract.

F. Offer.

The undersigned, having carefully examined the site of work, the Plans, Standard Specifications, Revision of December 2002, Standard Details Revision of December 2002, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of:

PIN 1234.00 West Eastport, Hot Mix Asphalt Overlay

State of Maine, on which bids will be received until the time specified in the "Notice to Contractors" do(es) hereby bid and offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict accordance with the terms and conditions of this Contract at the unit prices in the attached "Schedule of Items".

The Offeror agrees to perform the work required at the price specified above and in accordance with the bids provided in the attached "Schedule of Items" in strict accordance with the terms of this solicitation, and to provide the appropriate insurance and bonds if this offer is accepted by the Government in writing.

As Offeror also agrees:

First. To do any extra work, not covered by the attached "Schedule of Items", which may be ordered by the Resident, and to accept as full compensation the amount determined upon a "Force Account" basis as provided in the Standard Specifications, Revision of December 2002, and as addressed in the contract documents.

Second: That the bid bond at 5% of the bid amount or the official bank check, cashier's check, certificate of deposit or U. S. Postal Money Order in the amount given in the "Notice to Contractors", payable to the Treasurer of the State of Maine and accompanying this bid, shall be forfeited, as liquidated damages, if in case this bid is accepted, and the undersigned shall fail to abide by the terms and conditions of the offer and fail to furnish satisfactory insurance and Contract bonds under the conditions stipulated in the Specifications within 15 days of notice of intent to award the contract.

Third: To begin the Work on the date specified in the Engineer's "Notice to Commence Work" as stated in Section 107.2 of the Standard Specifications Revision of 2002 and complete the Work within the time limits given in the Special Provisions of this Contract.

Fourth: The Contractor will be bound to the Disadvantaged Business Enterprise (DBE) Requirements contained in the attached Notice (Additional Instructions to Bidders) and submit a completed Contractor's Disadvantaged Business Enterprise Utilization Plan by 4:30pm on the day of bid opening to the Contracts Engineer.

Fifth: That this offer shall remain open for 30 calendar days after the date of opening of bids.

Sixth: The Bidder hereby certifies, to the best of its knowledge and belief that: the Bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of competitive bidding in connection with its bid, and its subsequent contract with the Department.

	ctor, for itself, its successors and assigns, hereby Agreement and thereby binds itself to all covenants, ontract Documents CONTRACTOR
Date (Witness Sign Here) Witness	(Sign Here) (Signature of Legally Authorized Representative of the Contractor) (Print Name Here) (Name and Title Printed)
G. Award. Your offer is hereby accepted.	This award consummates the Contract, and the
documents referenced herein.	MAINE DEPARTMENT OF TRANSPORTATION
Date	By: David A. Cole, Commissioner
(Witness)	

BOND #	
--------	--

CONTRACT PERFORMANCE BOND

(Surety Company Form)

KNOW ALL MEN BY THESE PRESENT	S: That
and the State of	, as principal
and	
	vs of the State of and having a
-	the Treasurer of the State of Maine in the sum
	and 00/100 Dollars (\$
to be paid said Treasurer of the State of	Maine or his successors in office, for which
payment well and truly to be made, Prince	eipal and Surety bind themselves, their heirs and assigns, jointly and severally by these
The condition of this obligation is such th	at if the Principal designated as Contractor in
the Contract to construct Project Num promptly and	ber in the Municipality of faithfully performs the Contract, then this
obligation shall be null and void; otherwise	it shall remain in full force and effect.
The Surety hereby waives notice of any alto of Maine.	eration or extension of time made by the State
of Wante.	
Signed and sealed this	. day of, 20
WITNESSES:	SIGNATURES:
	CONTRACTOR:
Signature	
Print Name Legibly	
Signature	
Print Name Legibly	Print Name Legibly
SURETY ADDRESS:	NAME OF LOCAL AGENCY:
TELEPHONE	

BOND#		
-------	--	--

CONTRACT PAYMENT BOND

(Surety Company Form)

KNOW ALL MEN BY THESE PRE	SENTS: That	
and the	e State of	, as principal,
and		
a corporation duly organized under the usual place of business in		
as Surety, are held and firmly bound		
and benefit of claimants as		
		d 00/100 Dollars (\$
for the payment whereof Principal ar		
administrators, successors and assign	<u> </u>	
The condition of this obligation is so the Contract to construct Project	Number	
labor and material, used or required be said Contract, and fully reimburses obligee may incur in making good are be null and void; otherwise it shall read to a claimant is defined as one having Subcontractor of the Principal for laboration in the performance of the contract	the obligee for a my default of said P main in full force a mg a direct contrator, material or bot	Il outlay and expense which the Principal, then this obligation shall and effect. act with the Principal or with a
Signed and sealed this	day of	
WITNESS:	SIGNATU CONTRAC	RES:
Signature		
Print Name Legibly		
Time I value Degree,	SURETY:	o Degrees,
Signature		
Print Name Legibly		Legibly
SURETY ADDRESS:		LOCAL AGENCY:
		S
TELEPHONE		

General Decision Number: ME030009 07/30/2004 ME9

Superseded General Decision Number: ME020009

State: Maine

Construction Types: Highway

Counties: Aroostook, Franklin, Hancock, Kennebec, Knox, Lincoln, Oxford, Piscataquis, Sagadahoc, Somerset, Waldo and York Counties in Maine.

HIGHWAY CONSTRUCTION PROJECTS excluding major bridging (for example: bascule, suspension and spandrel arch bridges; those bridging waters presently navigating or to be navigatable; and those involving marine construction in any degree); tunnels, building structures in rest area projects and railroad construction.

 $\begin{array}{ccc} \text{Modification Number} & \text{Publication Date} \\ & 0 & 06/13/2003 \\ & 1 & 07/30/2004 \end{array}$

* ENGI0004-015 04/01/2004

	Rates	Fringes
Power equipment operators:		
Pavers	.\$ 16.51	6.70
Rollers	.\$ 16.51	6.70

SUME2000-008 10/24/2000

501112000 000 10/24/2000		
	Rates	Fringes
Carpenter	\$ 11.60	1.51
Structural	\$ 12.03	1.58
Drillers Flaggers Guardrail Installers	\$ 6.00	2.50
Landscape	\$ 7.87 \$ 8.69	.16
PipelayersRakersSign Erectors	\$ 9.00	2.31 1.51
Unskilled	\$ 8.66	1.38 .43
Power equipment operators: Backhoes	ė 11 07	2.05
Bulldozers	\$ 12.33	2.03 2.88 1.75
Excavators	\$ 12.38	2.48 3.73
Loaders	\$ 11.41	2.87 2.57
Dump Tri axle		3.10 1.18

Two	axle	\$ 8.56	2.19

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations

Wage and Hour Division

U.S. Department of Labor

200 Constitution Avenue, N.W.

Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator

U.S. Department of Labor

200 Constitution Avenue, N.W.

Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board

U.S. Department of Labor

200 Constitution Avenue, N.W.

Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

Project No. **NH-1010(600)E**

SPECIAL PROVISION CONSTRUCTION AREA

A Construction Area located in the **Town of <u>JACKMAN</u>** has been established by the Maine Department of Transportation in accordance with provisions of Title 29, Section 1703, Maine Revised Statutes Annotated.

- (a) The section of highway under construction beginning Sta.3+033.482 Sta.3+360.000 of the construction centerline plus approaches.
- (b) Route 201 from Sta. 3+033.482 to Sta. 3+360.000 of the construction centerline plus approaches.

The State Department of Transportation or the State's Engineer may issue permits for stated periods of time for moving construction equipment without loads, low-bed trailers with overloads, over-height, over-width or overlength equipment or materials over all State maintained sections described in the "Construction Area" above and in addition may issue permits for stated periods of time for moving overweight vehicles and loads over the section described in (a) above. The right to revoke such a permit at any time is reserved by the State Department of Transportation and the issuance of such permits shall be subject to any Special Provisions or Supplemental Specifications written for this project.

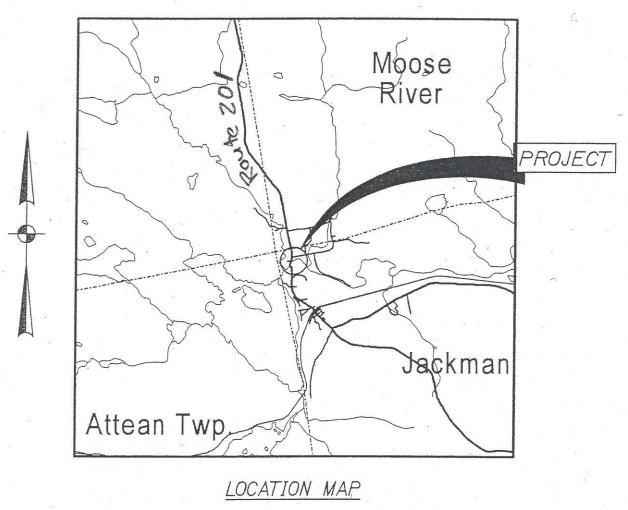
A Temporary Permit for each move may be issued by the State Department of Transportation or the State's Engineer for moving Contractor's construction equipment used on the project which exceeds the legal limits (shovels, bulldozers, etc.) to sources of construction material over highways maintained by the State reasonably within the area of the project.

The Municipal Officers for the **Town of <u>JACKMAN</u>** agreed that a permit will be issued to the Contractor for the purpose of hauling loads in excess of the limits as specified in Title 29, Maine Revised Statues Annotated, on the town ways as described in the "Construction Area" and that single move permits will be issued for moving Contractor's construction equipment used on the project which exceeds the legal limits (shovels, bulldozers, etc.) to sources of construction material over town ways reasonably within the area of the project.

In the event it is necessary to transport gravel, borrow, or other construction material in legally registered vehicles carrying legal loads over town ways, a Contractor's Bond of not more than Nine Thousand (\$9,000.00) per kilometer of traveled length may be required by the town, the exact amount of said bond to be determined prior to use of any town way.

The maximum speed limits for trucks on any town way will be forty (40) km per hour [25 mph], unless a higher legal limit is specifically agreed upon in writing by the Municipal Officers concerned.

PROJECT NO. NH - 1010(600) E PROJECT LENGTH 0.327 km BRIDGE REPLACEMENT BRIDGE NO. 2583



0 2 4

Scale in Kilometers

SPECIAL PROVISION CONSTRUCTION AREA

Title 29A, M.R.S.A., Subsection 2383. Overlimit movement permits

- 1. Overlimit movement permits issued by State. The Secretary of State, acting under guidelines and advice of the Commissioner of Transportation, may grant permits to move non-divisible objects having a length, width, height or weight greater than specified in this Title over a way or bridge maintained by the Department of Transportation.
- 2. Permit Fee. The Secretary of State, with the advice of the Commissioner of Transportation, may set the fee for these permits, at not less than \$3, nor more than \$15, based on weight, height, length and width.
- 3. County and municipal permits. A permit may be granted, for a reasonable fee, by county commissioners or municipal officers for travel over a way or bridge maintained by that county or municipality.
- 4. Permits for weight. A vehicle granted a permit for excess weight must first be registered for the maximum gross vehicle weight allowed for that vehicle.
- 5. Special mobile equipment. The Secretary of State may grant a permit, for no more than one year, to move pneumatic-tire equipment under its own power, including Class A and Class B special mobile equipment, over ways and bridges maintained by the Department of Transportation. The fee for that permit is \$15 for each 30-day period.
- 6. Scope of permit. A permit is limited to the particular vehicle or object to be moved and particular ways and bridges.
- 7. Construction permits. A permit for a stated period of time may be issued for loads and equipment employed on public way construction projects, United States Government projects or construction of private ways, when within construction areas established by the Department of Transportation. The Permit:
 - A. Must be procured from the municipal officers for a construction area within that municipality;
 - B. May require the Contractor to be responsible for damage to ways used in the construction areas and ma provide for:
 - (1) Withholding by the agency contraction the work of final payment under contract; or
 - (2) The furnishing of a bond by the Contractor to guarantee suitable repair or payment damages.
 - C. May be granted by the Department of Transportation or by the state engineer in charge of the construction contract; and
 - D. For construction areas, carries no fee and does not come within the scope of this section.
- 8. Gross vehicle weight permits. The following may grant permits to operate a vehicle having a gross vehicle weight exceeding the prescribed limit:

- A. The Secretary of State, with the consent of the Department of Transportation, for state and state aid highways and bridges within city or compact village limits;
- B. Municipal officers, for all other ways and bridges within that city and compact village limits; and
- C. The county commissioners, for county roads and bridges located in unorganized territory.
- 9. Pilot vehicles and state police escorts. Pilot vehicles required by a permit must be equipped with warning lights and signs as required by the Secretary of State with the advice of the Department of Transportation.

Warning lights may only be operated and lettering on the signs may only be visible on a pilot vehicle while it is escorting on a public way a vehicle with a permit.

The Secretary of State shall require a State Police escort for a single vehicle or a combination of vehicles of 125 feet or more in length or 16 feet or more in width. The Secretary of State, with the advice of the Commissioner of Transportation, may require vehicles of lesser dimensions to be escorted by the State Police.

The Bureau of State Police shall establish a fee for State Police escorts.

All fees collected must be used to defray the cost of services provided.

With the advice of the Commissioner of Transportation and the Chief of the State Police, the Secretary of State shall establish rules for the operation for the operation of pilot vehicles.

10. Taxes paid. A permit for a mobile home may not be granted unless the applicant provides reasonable assurance that all property taxes, sewage disposal charges and drain and sewer assessments applicable to the mobile home, including those for the current tax year, have been paid or that the mobile home is exempt from those taxes.

1993, c. 683, § S-2, eff. January 1, 1995.

Historical and Statutory Notes

Derivation:

	Laws 1977, c. 73, § 5.
	Laws 1981, c. 413.
R.S. 1954, c. 22 § 98	Laws 1985, c. 225, § 1
Laws 1955, c. 389	Laws 1987. c. 52.
Laws 1967, c. 3.	Laws 1987, 781, § 3.
Laws 1971, c. 593, § 22.	Laws 1989, c. 866, § B-13.
Laws 1973, c. 213.	Laws 1991, c. 388, § 8.
Laws 1975, c. 130, §	Laws 1993, c. 683, § A-1.
Laws 1975, c. 319, § 2	. Former 29 M.R.S.A. § 2382.

Cross Reference

Collection by Secretary of State, See 29-A M.R.S.A. § 154.

SPECIAL PROVISION

(Consolidated Special Provisions)

SPECIAL PROVISION SECTION 101 CONTRACT INTERPRETATION

101.2 Definitions - Closeout Documentation

Replace the sentence "A letter stating the amount..... DBE goals." with "DBE Goal Attainment Verification Form"

SPECIAL PROVISION SECTION 102 DELIVERY OF BIDS

(Location and Time)

102.7.1 Location and Time Add the following sentence "As a minimum, the Bidder will submit a Bid Package consisting of the Notice to Contractors, the completed Acknowledgement of Bid Amendments & Submission of Bid Bond Validation Number form, the completed Schedule of Items, 2 copies of the completed Agreement, Offer, & Award form, a Bid Bond or Bid Guarantee, and any other Certifications or Bid Requirements listed in the Bid Book."

SPECIAL PROVISION SECTION 103 AWARD AND CONTRACTING

103.3.1 Notice and Information Gathering Change the first paragraph to read as follows: "After Bid Opening and as a condition for Award of a Contract, the Department may require an Apparent Successful Bidder to demonstrate to the Department's satisfaction that the Bidder is responsible and qualified to perform the Work."

SPECIAL PROVISION SECTION 104 GENERAL RIGHTS AND RESPONSIBILITIES

Delete the entire Section 104.5.9 and replace with the following:

<u>104.5.9 Landscape Subcontractors</u> The Contractor shall retain only Landscape Subcontractors that are certified by the Department's Environmental Office Landscape Unit.

SPECIAL PROVISION SECTION 105 GENERAL SCOPE OF WORK

Delete the entire Section 105.6 and replace with the following:

105.6.1 Department Provided Services The Department will provide the Contractor with the description and coordinates of vertical and horizontal control points, set by the Department, within the Project Limits, for full construction Projects and other Projects where survey control is necessary. For Projects of 1,500 feet in length, or less: The Department will provide three points. For Projects between 1,500 and 5,000 feet in length: The Department will provide one set of two points at each end of the Project. For Projects in excess of 5,000 feet in length, the Department will provide one set of two points at each end of the Project, plus one additional set of two points for each mile of Project length. For non-full construction Projects and other Projects where survey control is not necessary, the Department will not set any control points and, therefore, will not provide description and coordinates of any control points. Upon request of the Contractor, the Department will provide the Department's survey data management software and Survey Manual to the Contractor, or its survey Subcontractor, for the exclusive use on the Department's Projects.

105.6.2 Contractor Provided Services Utilizing the survey information and points provided by the Department, described in Subsection 105.6.1, Department Provided Services, the Contractor shall provide all additional survey layout necessary to complete the Work. This may include, but not be limited to, reestablishing all points provided by the Department, establishing additional control points, running axis lines, providing layout and maintenance of all other lines, grades, or points, and survey quality control to ensure conformance with the Contract. The Contractor is also responsible for providing construction centerline, or close reference points, for all Utility Facilities relocations and adjustments as necessary to complete the Work. When the Work is to connect with existing Structures, the Contractor shall verify all dimensions before proceeding with the Work. The Contractor shall employ or retain competent engineering and/or surveying personnel to fulfill these responsibilities.

The Contractor must notify the Department of any errors or inconsistencies regarding the data and layout provided by the Department as provided by Section 104.3.3 - Duty to Notify Department If Ambiguities Discovered.

105.6.2.1 Survey Quality Control The Contractor is responsible for all construction survey quality control. Construction survey quality control is generally defined as, first, performing initial field survey layout of the Work and, second, performing an independent check of the initial layout using independent survey data to assure the accuracy of the initial layout; additional iterations of checks may be required if significant discrepancies are discovered in this process. Construction survey layout quality control also requires written documentation of the layout

process such that the process can be followed and repeated, if necessary, by an independent survey crew.

105.6.3 Survey Quality Assurance It is the Department's prerogative to perform construction survey quality assurance may, or may not, be performed by the Department. Construction survey quality assurance is generally defined as an independent check of the construction survey quality control. The construction survey quality assurance process may involve physically checking the Contractor's construction survey layout using independent survey data, or may simply involve reviewing the construction survey quality control written documentation. If the Department elects to physically check the Contractor's survey layout, the Contractor's designated surveyor may be required to be present. The Department will provide a minimum notice of 48 hours to the Contractor, whenever possible, if the Contractor's designated surveyor's presence is required. Any errors discovered through the quality assurance process shall be corrected by the Contractor, at no additional cost to the Department.

105.6.4 Boundary Markers The Contractor shall preserve and protect from damage all monuments or other points that mark the boundaries of the Right-of-Way or abutting parcels that are outside the area hat must be disturbed to perform the Work. The Contractor indemnifies and holds harmless the Department from all claims to reestablish the former location of all such monuments or points including claims arising from 14 MRSA § 7554-A. For a related provision, see Section 104.3.11 - Responsibility for Property of Others.

SPECIAL PROVISION SECTION 106 QUALITY

106.6 Acceptance Add the following to paragraph 1 of A: "This includes Sections 401 - Hot Mix Asphalt, 402 - Pavement Smoothness, and 502 - Structural Concrete - Method A - Air Content."

Add the following to the beginning of paragraph 3 of A: "For pay factors based on Quality Level Analysis, and"

SPECIAL PROVISION SECTION 107 TIME

<u>107.3.1 General</u> Add the following: "If a Holiday occurs on a Sunday, the following Monday shall be considered a Holiday. Sunday or Holiday work must be approved by the Department, except that the Contractor may work on Martin Luther King Day, President's Day, Patriot's Day, the Friday after Thanksgiving, and Columbus Day without the Department's approval."

<u>107.7.2 Schedule of Liquidated Damages</u> Replace the table of Liquidated Damages with the following:

From	Up to and	Amount of Liquidated
More Than	Including	Damages per Calendar Day
\$0	\$100,000	\$100
\$100,000	\$300,000	\$200
\$300,000	\$500,000	\$400
\$500,000	\$1,000,000	\$575
\$1,000,000	\$2,000,000	\$750
\$2,000,000	\$4,000,000	\$900
\$4,000,000	and more	\$1,875

SPECIAL PROVISION SECTION 108 PAYMENT

<u>108.4 Payment for Materials Obtained and Stored</u> First paragraph, second sentence, delete the words "...Delivered on or near the Work site at acceptable storage places."

SPECIAL PROVISION SECTION 109 CHANGES

- 109.1.1 Changes Permitted Add the following to the end of the paragraph: "There will be no adjustment to Contract Time due to an increase or decrease in quantities, compared to those estimated, except as addressed through Contract Modification(s)."
- 109.1.2 Substantial Changes to Major Items Add the following to the end of the paragraph: "Contract Time adjustments may be made for substantial changes to Major Items when the change affects the Critical Path, as determined by the Department"
- 109.4.4 Investigation / Adjustment In the third sentence, delete the words "subsections (A) (E)"

109.5.1 Definitions - Types of Delays

- <u>B. Compensable Delay</u> Replace (1) with the following; "a weather related Uncontrollable Event of such an unusually severe nature that a Federal Emergency Disaster is declared. The Contractor will only be entitled to an Equitable Adjustment if the Project falls within the geographic boundaries prescribed under the disaster declaration."
- 109.7.2 Basis of Payment Replace with the following: "Equitable Adjustments will be established by mutual Agreement for compensable items listed in Section 109.7.3-

Compensable Items, based upon Unit or Lump Sum Prices. If Agreement cannot be reached, the Contractor shall accept payment on a Force Account basis as provided in Section 109.7.5 - Force Account Work, as full and complete compensation for all Work relating to the Equitable Adjustment."

<u>109.7.3 Compensable Items</u> Replace with the following: "The Contractor is entitled to compensation for the following items, with respect to agreed upon Unit or Lump Sum Prices:

- 1. Labor expenses for non-salaried Workers and salaried foremen.
- 2. Costs for Materials.
- 3. A markup on the totals of Items 1 and 2 of this subsection 109.7.3 for home office overhead and profit of the Contractor, its Subcontractors and suppliers, and any lower tier Subcontractors or suppliers, with no mark-ups on mark-ups.
- 4. Cost for Equipment, based on Blue Book Rates or leased rates, as set forth in Section 109.7.5(C), or the Contractor's Actual Costs.
- 5. Costs for extended job-site overhead.
- 6. Time.
- 7. Subcontractor quoted Work, as set forth below in Section 109.7.5 (F)."

109.7.5 Force Account Work

C. Equipment

Paragraph 2, delete sentence 1 which starts; "Equipment leased...."

Paragraph 6, change sentence 2 from "The Contractor may furnish..." to read "If requested by the Department, the Contractor will produce cost data to assist the Department in the establishment of such rental rate, including all records that are relevant to the Actual Costs including rental Receipts, acquisition costs, financing documents, lease Agreements, and maintenance and operational cost records."

Add the following paragraph; "Equipment leased by the Contractor for Force Account Work and actually used on the Project will be paid for at the actual invoice amount plus 10% markup for administrative costs."

Add the following section;

"<u>F. Subcontractor Quoted Work</u> When accomplishing Force Account Work that utilizes Subcontractor quoted Work, the Contractor will be allowed a maximum markup of 5% for profit and overhead."

SPECIAL PROVISION SECTION 110 INDEMNIFICATION, BONDING, AND INSURANCE

Delete the entire Section 110.2.3 and replace with the following:

110.2.3 Bonding for Landscape Establishment Period The Contractor shall provide a signed, valid, and enforceable Performance, Warranty, or Maintenance Bond complying with the Contract, to the Department at Final Acceptance.

The bond shall be in the full amount for all Pay Items for work pursuant to Sec 621, Landscape, payable to the "Treasurer - State of Maine," and on the Department's forms, on exact copies thereof, or on forms that do not contain any significant variations from the Department's forms as solely determined by the Department.

The Contractor shall pay all premiums and take all other actions necessary to keep said bond in effect for the duration of the Landscape Establishment Period described in Special Provision 621.0036 - Establishment Period. If the Surety becomes financially insolvent, ceases to be licensed or approved to do business in the State of Maine, or stops operating in the United States, the Contractor shall file new bonds complying with this Section within 10 Days of the date the Contractor is notified or becomes aware of such change.

All Bonds shall be procured from a company organized and operating in the United States, licensed or approved to do business in the State of Maine by the State of Maine Department of Business Regulation, Bureau of Insurance, and listed on the latest Federal Department of the Treasury Isting for "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies."

By issuing a bond, the Surety agrees to be bound by all terms of the Contract, including those related to payment, time for performance, quality, warranties, and the Department's self-help remedy provided in Section 112.1 - Default to the same extent as if all terms of the Contract are contained in the bond(s).

Regarding claims related to any obligations covered by the bond, the Surety shall provide, within 60 Days of Receipt of written notice thereof, full payment of the entire claim or written notice of all bases upon which it is denying or contesting payment. Failure of the Surety to provide such notice within the 60-day period constitutes the Surety's waiver of any right to

deny or contest payment and the Surety's acknowledgment that the claim is valid and undisputed.

SPECIAL PROVISION SECTION 401 HOT MIX ASPHALT PAVEMENT

401.18 Quality Control Method A & B Make the following change to paragraph a. QCP Administrator; in the final sentence, change "...certified as a Plant Technician or Paving Inspector..." to "...certified as a Quality Assurance Technologist..."

401.201 Method A Under a. Lot Size, add the following; 'Each lot will be divided into a minimum of four sublots for mix properties and five sublots for percent TMD."

SPECIAL PROVISION SECTION 402 PAVEMENT SMOOTHNESS

Add the following: "Projects to have their pavement smoothness analyzed in accordance with this Specification will be so noted in Special Provision 403 - Bituminous Box."

<u>"402.02 Lot Size</u> Lot size for smoothness will be 1000 lane-meters [3000 lane-feet]. A sublot will consist of 20 lane-meters [50 lane-feet]. Partial lots will be included in the previous lot if less than one-half the size of a normal lot. If greater than one-half the normal lot size, it will be tested as a separate lot."

SPECIAL PROVISION SECTION 502 STRUCTURAL CONCRETE

502.05 Composition and Proportioning; TABLE #1; NOTE #2; third sentence; Change "...alcohol based saline sealer..." to "alcohol based silane sealer..."

502.0502 Quality Assurance Method A - Rejection by Resident Change the first sentence to read: "For an individual sublot with test results failing to meet the criteria in Table #1, or if the calculated pay factor for Air Content is less than 0.80....."

502.0503 Quality Assurance Method B - Rejection by Resident Change the first sentence to read: "For material represented by a verification test with test results failing to meet the criteria in Table #1, the Department will....."

<u>502.0505</u> Resolution of Disputed Acceptance Test Results Combine the second and third sentence to read: "Circumstances may arise, however, where the Department may"

502.10 Forms and False work

<u>D. Removal of Forms and False work</u> 1., First paragraph; first, second, and third sentence; replace "forms" with "forms and false work"

502.11 Placing Concrete

<u>G. Concrete Wearing Surface and Structural Slabs on Precast Superstructures</u> Last paragraph; third sentence; replace "The temperature of the concrete shall not exceed 24° C [75° F} at the time of placement." with "The temperature of the concrete shall not exceed 24° C [75° F} at the time the concrete is placed in its final position."

<u>502.15 Curing Concrete</u> First paragraph; replace the first sentence with the following; "All concrete surfaces shall be kept wet with clean, fresh water for a curing period of at least 7 days after concrete placing, with the exception of vertical surfaces as provided for in Section 501.10 (D) - Removal of Forms and False work."

Second paragraph; delete the first two sentences.

Third paragraph; delete the entire paragraph which starts "When the ambient temperature...."

Fourth paragraph; delete "approved" to now read "...continuously wet for the entire curing period..."

Fifth paragraph; second sentence; change "...as soon as it is possible to do so without damaging the concrete surface." to "...as soon as possible."

Seventh paragraph; first sentence; change "...until the end of the curing period." to "...until the end of the curing period, except as provided for in Section 502.10(D) - Removal of Forms and False work."

SPECIAL PROVISION SECTION 503 REINFORCING STEEL

<u>503.06 Placing and Fastening</u> Change the second paragraph, first sentence from: "All tack welding shall be done in accordance with Section 504, Structural Steel." to "All tack welding shall be done in accordance with AWS D1.4 Structural Welding Code - Reinforcing Steel."

SPECIAL PROVISION SECTION 504 STRUCTURAL STEEL

504.18 Plates for Fabricated Members Change the second paragraph, first sentence from: "...ASTM A 898/A 898 M..." to "...ASTM A 898/A 898 M or ASTM A 435/A 435 M as applicable and..."

SPECIAL PROVISION SECTION 535 PRECAST, PRESTRESSED CONCRETE SUPERSTRUCTURE

<u>535.02 Materials</u> Change "Steel Strand for Concrete Reinforcement" to "Steel Strand." Add the following to the beginning of the third paragraph; "Concrete shall be Class P conforming to the requirements in this section. 28 day compressive strength shall be as stated on the plans. Coarse aggregate…"

535.26 Lateral Post-Tensioning Replace the first paragraph; "A final tension..." with "Overstressing strands for setting losses cannot be accomplished for chuck to chuck lengths of 7.6 m [25 ft] and less. In such instances, refer to the Plans for all materials and methods. Otherwise, post-tensioning shall be in accordance with PCI standards and shall provide the anchorage force noted in the Plans. The applied jacking force shall be no less than 100% of the design jacking force."

SPECIAL PROVISION SECTION 603 PIPE CULVERTS AND STORM DRAINS

<u>603.0311 Corrugated Polyethylene Pipe for Option III</u> Replace the Minimum Mandrel Diameter Table with the following:

Nominal Size	Minimum Mandrel	Nominal Size	Minimum Mandrel	
US Customary (in)	Diameter (in)	Metric (mm)	Diameter (mm)	
12	11.23	300	280.73	
15	14.04	375	350.91	
18	16.84	450	421.09	
24	22.46	600	561.45	
30	28.07	750	701.81	
36	33.69	900	842.18	
42	39.30	1050	982.54	
48	44.92	1200	1122.90	

SPECIAL PROVISION SECTION 604 MANHOLES, INLETS, AND CATCH BASINS

604.02 Materials Add the following:

"Tops and Traps 712.07 Corrugated Metal Units 712.08 Catch Basin and Manhole Steps 712.09"

SPECIAL PROVISION SECTION 605 UNDERDRAINS

<u>605.05 Underdrain Outlets</u> Make the following change:

In the first paragraph, second sentence, delete the words "metal pipe".

SPECIAL PROVISION SECTION 606 GUARDRAIL

606.02 Materials Delete the entire paragraph which reads "The sole patented supplier of multiple mailbox...." and replace with "Acceptable multiple mailbox assemblies shall be listed on the Department's Approved Products List and shall be NCHRP 350 tested and approved."

Delete the entire paragraph which reads "Retroreflective beam guardrail delineators...." and replace with "Reflectorized sheeting for Guardrail Delineators shall meet the requirements of Section 719.01 - Reflective Sheeting. Delineators shall be fabricated from high-impact, ultraviolet and weather resistant thermoplastic.

606.09 Basis of Payment First paragraph; delete the second and third sentence in their entirety and replace with "Butterfly-type guardrail reflectorized delineators shall be mounted on all Wbeam guardrail at an interval of every 10 posts [62.5 ft] on tangents sections and every 5 posts [31.25 ft] on curved sections as directed by the Resident. On divided highways, the delineators shall be yellow on the left hand side and silver/white on the right hand side. On two-way roadways, the delineators shall be silver/white on the right hand side. All delineators shall have retroreflective sheeting applied to only the traffic facing side. Reflectorized guardrail delineators will not be paid for directly, but will be considered incidental to the guardrail items."

SPECIAL PROVISION SECTION 615 LOAM

615.02 Materials Make the following change:

Organic Content

Percent by Volume

Humus

"5% - 10%", as determined by Ignition Test

SPECIAL PROVISION SECTION 618 SEEDING

<u>618.01 Description</u> Change the first sentence to read as follows: "This work shall consist of furnishing and applying seed" Also remove ",and cellulose fiber mulch" from 618.01(a).

<u>618.03 Rates of Application</u> In 618.03(a), remove the last sentence and replace with the following: "These rates shall apply to Seeding Method 2, 3, and Crown Vetch."

In 618.03(c) "1.8 kg [4 lb]/unit." to "1.95 kg [4 lb]/unit."

618.09 Construction Method In 618.09(a) 1, sentence two, replace "100 mm [4 in]" with "25 mm [1 in] (Method 1 areas) and 50 mm [2 in] (Method 2 areas)"

618.15 Temporary Seeding Change the Pay Unit from Unit to Kg [lb].

SPECIAL PROVISION SECTION 620 GEOTEXTILES

620.03 Placement Section (c)

Title: Replace "Non-woven" in title with "Erosion Control".

First Paragraph: Replace first word "Non-woven" with "Woven monofilament".

Second Paragraph: Replace second word "Non-woven" with "Erosion Control".

620.07 Shipment, Storage, Protection and Repair of Fabric Section (a)

Replace the third sentence with the following: "Damaged geotextiles, <u>as identified by the Resident</u>, shall be repaired immediately."

620.09 Basis of Payment

Pay Item 620.58: Replace "Non-woven" with "Erosion Control"

Pay Item 620.59: Replace "Non-woven" with "Erosion Control"

SPECIAL PROVISION SECTION 621 LANDSCAPING

<u>621.0036 Establishment Period</u> In paragraph 4 and 5, change "time of Final Acceptance" to "end of the period of establishment". In Paragraph 7, change "Final Acceptance date" to ""end

of the period of establishment" and change "date of Final Acceptance" to "end of the period of establishment".

SPECIAL PROVISION SECTION 626 HIGHWAY SIGNING

626.034 Concrete Foundations Add to the following to the end of the second paragraph: "Pre-cast and cast-in-place foundations shall be warranteed against leaning and corrosion for two years after the project is completed. If the lean is greater than 2 degrees from normal or the foundation is spalling within the first two years, the Contractor shall replace the foundation at no extra cost."

SPECIAL PROVISION SECTION 637 DUST CONTROL

637.06 Basis of Payment Add the following after the second sentence of the third paragraph: "Failure by the Contractor to follow Standard Specification or Special Provision - Section 637 and/or the Contractor's own Soil Erosion and Pollution Control Plan concerning Dust Control and/or visible evidence of excessive dust problems, as determined by the Resident, will result in a reduction in payment, computed by reducing the Lump Sum Total by 5% per occurrence per day. The Department's Resident or any other representative of the Department reserves the right to suspend the work at any time and request a meeting to discuss violations and remedies. The Department shall not be held responsible for any delay in the work due to any suspension under this item. Additional penalties may also be assessed in accordance with Special Provision 652 - Work Zone Traffic Control and Standard Specification 656 - Temporary Soil Erosion and Water Pollution Control."

SPECIAL PROVISION SECTION 639 ENGINEERING FACILITIES

<u>639.04 Field Offices</u> Change the forth to last paragraph from: "The Contractor shall provide a fully functional desktop copier..." to "....desktop copier/scanner..."

SPECIAL PROVISION SECTION 652 MAINTENANCE OF TRAFFIC

<u>652.3.5 Installation of Traffic Control Devices</u> In the first paragraph, first sentence; change "Signs shall be erected..." to "Portable signs shall be erected..." In the third sentence; change

"Signs must be erected so that the sign face..." to "Post-mounted signs must also be erected so that the sign face..."

652.8.2 Other Items Replace the last paragraph with the following: "There will be no payment made under any 652 pay items after the expiration of the adjusted total contract time."

SPECIAL PROVISION SECTION 653 POLYSTYRENE PLASTIC INSULATION

653.05 Placing Backfill In the second sentence; change "...shall be not less than 150 mm [6 in] loose measure." to "...shall be not less than 250 mm [10 in] loose measure." In the third sentence; change "...crawler type bulldozer of not more than 390 kg/m² [80 lb/ft²] ground contact pressure..." to "...crawler type bulldozer of not more than 4875 kg/m² [2000 lb/ft²] ground contact pressure..."

<u>653.06 Compaction</u> In the last sentence; change "...crawler type bulldozer of not more than 390 kg/m² [80 lb/ft²] ground contact pressure..." to "...crawler type bulldozer of not more than 4875 kg/m^2 [2000 lb/ft²] ground contact pressure..."it]."

SPECIAL PROVISION SECTION 656 TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL

656.5.1 If Pay Item 656.75 Provided Replace the second paragraph with the following: "Failure by the Contractor to follow Standard Specification or Special Provision - Section 656 and/or the Contractor's own Soil Erosion and Pollution Control Plan will result in a reduction in payment, computed by reducing the Lump Sum Total by 5% per occurrence per day. The Department's Resident or any other representative of the Department reserves the right to suspend the work at any time and request a meeting to discuss violations and remedies. The Department shall not be held responsible for any delay in the work due to any suspension under this item."

SPECIAL PROVISION SECTION 703 AGGREGATES

703.06 Aggregate for Base and Subbase Delete the first paragraph: "The material shall have..." and replace with "The material shall have a minimum degradation value of 15 as determined by Washington State DOT Test Method T113, Method of Test for Determination of Degradation Value (March 2002 version), except that the reported degradation value will be the result of testing a single specimen from that portion of a sample that passes the 12.5 mm [½ in] sieve and is retained on the 2.00 mm [No. 10] sieve, minus any reclaimed asphalt pavement used."

703.07 Aggregates for HMA Pavements Delete the forth paragraph: "The composite blend shall have..." and replace with "The composite blend, minus any reclaimed asphalt pavement used, shall have a Micro-Deval value of 18.0 or less as determined by AASHTO TP 58. In the event the material exceeds the Micro Deval limit, a Washington Degradation test shall be performed. The material shall be acceptable if it has a value of 30 or more as determined by Washington State DOT Test Method T 113, Method of Test for Determination of Degradation Value (March 2002 version) except that the reported degradation value will be the result of testing a single composite specimen from that portion of the sample that passes the 12.5mm [1/2 inch] sieve and is retained on the 2.00mm [No 10] sieve, minus any reclaimed asphalt pavement used."

703.22 Underdrain Backfill Material Change the first paragraph from "...for Underdrain Type B..." to "...for Underdrain Type B and C..."

SPECIAL PROVISION SECTION 706 NON-METALLIC PIPE

706.06 Corrugated Polyethylene Pipe for Underdrain, Option I and Option III Culvert Pipe Change the first sentence from "...300 mm diameters to 900 mm" to "...300 mm diameters to 1200 mm" Delete, in it's entirety, the last sentence which begins "This pipe and resins..." and replace with the following; "The manufacturing plants of polyethylene pipe shall be certified by the Eastern States Consortium. Polyethylene pipe shall be accepted based on third party certification by the AASHTO's National Transportation Product Evaluation Program."

SPECIAL PROVISION SECTION 709 REINFORCING STEEL AND WELDED STEEL WIRE FABIC

709.03 Steel Strand Change the second paragraph from "...shall be 12mm [½ inch] AASHTO M203M/M203 (ASTM A416/A416M)..." to "...shall be 15.24 mm [0.600 inch] diameter AASHTO M203 (ASTM A416)..."

SPECIAL PROVISION SECTION 712 MISCELLANEOUS HIGHWAY MATERIALS

Add the following:

<u>"712.07 Tops, and Traps</u> These metal units shall conform to the plan dimensions and to the following specification requirements for the designated materials.

Gray iron castings shall conform to the requirements of AASHTO M105, Class 30, unless otherwise designated.

Carbon steel castings shall conform to the requirements of AASHTO M103/M103M. Grade shall be 450-240 [65-35] unless otherwise designated.

Structural steel shall conform to the requirements of AASHTO M183/M183M or ASTM A283/A283M, Grade B or better. Galvanizing, where specified for these units, shall conform to the requirements of AASHTO M111.

712.08 Corrugated Metal Units The units shall conform to plan dimensions and the metal to AASHTO M36/M36M. Bituminous coating, when specified, shall conform to AASHTO M190 Type A.

712.09 Catch Basin and Manhole Steps Steps for catch basins and for manholes shall conform to ASTM C478M [ASTM C478], Section 13 for either of the following material:

- (a) Aluminum steps-ASTM B221M, [ASTM B211] Alloy 6061-T6 or 6005-T5.
- (b) Reinforced plastic steps Steel reinforcing bar with injection molded plastic coating copolymer polypropylene. Polypropylene shall conform to ASTM D 4101.

<u>712.23 Flashing Lights</u> Flashing Lights shall be power operated or battery operated as specified.

(a) Power operated flashing lights shall consist of housing, adapters, lamps, sockets, reflectors, lens, hoods and other necessary equipment designed to give clearly visible signal indications within an angle of at least 45 degrees and from 3 to 90 m [10 to 300 ft] under all light and atmospheric conditions.

Two circuit flasher controllers with a two-circuit filter capable of providing alternate flashing operations at the rate of not less than 50 nor more than 60 flashes per minute shall be provided.

The lamps shall be 650 lumens, 120 volt traffic signal lamps with sockets constructed to properly focus and hold the lamp firmly in position.

The housing shall have a rotatable sun visor not less than 175 mm [7 in] in length designed to shield the lens.

Reflectors shall be of such design that light from a properly focused lamp will reflect the light rays parallel. Reflectors shall have a maximum diameter at the point of contact with the lens of approximately 200 mm [8 in].

The lens shall consist of a round one-piece convex amber material which, when mounted, shall have a visible diameter of approximately 200 mm [8 in]. They shall distribute light

and not diffuse it. The distribution of the light shall be asymmetrical in a downward direction. The light distribution of the lens shall not be uniform, but shall consist of a small high intensity portion with narrow distribution for long distance throw and a larger low intensity portion with wide distribution for short distance throw. Lenses shall be marked to indicate the top and bottom of the lens.

(b) Battery operated flashing lights shall be self- illuminated by an electric lamp behind the lens. These lights shall also be externally illuminated by reflex-reflective elements built into the lens to enable it to be seen by reflex-reflection of the light from the headlights of oncoming traffic. The batteries must be entirely enclosed in a case. A locking device must secure the case. The light shall have a flash rate of not less than 50 nor more than 60 flashes per minute from minus 30 °C [minus 20 °F] to plus 65 °C [plus 150 °F]. The light shall have an on time of not less than 10 percent of the flash cycle. The light beam projected upon a surface perpendicular to the axis of the light beam shall produce a lighted rectangular projection whose minimum horizontal dimension shall be 5 degrees each side of the horizontal axis. The effective intensity shall not have an initial value greater than 15.0 candelas or drop below 4.0 candelas during the first 336 hours of continuous flashing. The illuminated lens shall appear to be uniformly bright over its entire illuminated surface when viewed from any point within an angle of 9 degrees each side of the vertical axis and 5 degrees each side of the horizontal axis. The lens shall not be less than 175 mm [7 in] in diameter including a reflex-reflector ring of 13 mm [½ in] minimum width around the periphery. The lens shall be yellow in color and have a minimum relative luminous transmittance of 0.440 with a luminance of 2854° Kelvin. The lens shall be The lens material shall be plastic and meet the luminous one-piece construction. transmission requirements of this specification. The case containing the batteries and circuitry shall be constructed of a material capable of withstanding abuse equal to or greater than 1.21 mm thick steel [No. 18 U.S. Standard Gage Steel]. The housing and the lens frame, if of metal shall be properly cleaned, degreased and pretreated to promote adhesion. It shall be given one or more coats of enamel which, when dry shall completely obscure the metal. The enamel coating shall be of such quality that when the coated case is struck a light blow with a sharp tool, the paint will not chip or crack and if scratched with a knife will not powder. The case shall be so constructed and closed as to exclude moisture that would affect the proper operation of light. The case shall have a weep hole to allow the escape of moisture from condensation. Photoelectric controls, if provided, shall keep the light operating whenever the ambient light falls below 215 lx [20] foot candles]. Each light shall be plainly marked as to the manufacturer's name and model number.

If required by the Resident, certification as to conformance to these specifications shall be furnished based on results of tests made by an independent testing laboratory. All lights are subject to random inspection and testing. All necessary random samples shall be

provided to the Resident upon request without cost to the Department. All such samples shall be returned to the Contractor upon completion of the tests.

- 712.32 Copper Tubing Copper tubing and fittings shall conform to the requirements of ASTM B88M Type A [ASTM B88, Type K] or better.
- 712.33 Non-metallic Pipe, Flexible Non-metallic pipe and pipe fittings shall be acceptable flexible pipe manufactured from virgin polyethylene polymer suitable for transmitting liquids intended for human or animal consumption.
- 712.34 Non-metallic Pipe, Rigid Non-metallic pipe shall be Schedule 40 polyvinylchloride (PVC) that meets the requirement of ASTM D1785. Fittings shall be of the same material.
- <u>712.341 Metallic Pipe</u> Metallic pipe shall be ANSI, Standard B36.10, Schedule 40 steel pipe conforming to the requirements of ASTM A53 Types E or S, Grade B. End plates shall be steel conforming to ASTM A36/A36M.

Both the sleeve and end plates shall be hot dip galvanized. Pipe sleeve splices shall be welded splices with full penetration weld before galvanizing.

- 712.35 Epoxy Resin Epoxy resin for grouting or sealing shall consist of a mineral filled thixotropic, flexible epoxy resin having a pot life of approximately one hour at 10°C [50°F]. The grout shall be an approved product suitable for cementing steel dowels into the preformed holes of curb inlets and adjacent curbing. The sealant shall be an approved product, light gray in color and suitable for coating the surface.
- <u>712.36 Bituminous Curb</u> The asphalt cement for bituminous curb shall be of the grade required for the wearing course, or shall be Viscosity Grade AC-20 meeting the current requirements of Subsection 702.01 Asphalt Cement. The aggregate shall conform to the requirements of Subsection 703.07. The coarse aggregate portion retained on the 2.36 mm [No. 8] sieve may be either crushed rock or crushed gravel.

The mineral constituents of the bituminous mixture shall be sized and graded and combined in a composite blend that will produce a stable durable curbing with an acceptable texture. Bituminous material for curb shall meet the requirements of Section 403 - Hot Bituminous Pavement.

712.37 Precast Concrete Slab Portland cement concrete for precast slabs shall meet the requirements of Section 502 - Structural Concrete, Class A.

The slabs shall be precast to the dimension shown on the plans and cross section and in accordance with the Standard Detail plans for Concrete Sidewalk Slab. The surface shall be

finished with a float finish in accordance with Subsection 502.14(c). Lift devices of sufficient strength to hold the slab while suspended from cables shall be cast into the top or back of the slab.

<u>712.38 Stone Slab</u> Stone slabs shall be of granite from an acceptable source, hard, durable, predominantly gray in color, free from seams which impair the structural integrity and be of smooth splitting character. Natural color variations characteristic of the deposit will be permitted. Exposed surfaces shall be free from drill holes or indications of drill holes. The granite slabs in any one section of backslope must be all the same finish.

The granite slabs shall be scabble dressed or sawed to an approximately true plane having no projections or depressions over 13 mm [½ in] under a 600 mm [2 ft] straightedge or over 25 mm [1 in] under a 1200 mm [4 ft] straightedge. The arris at the intersection of the top surface and exposed front face shall be pitched so that the arris line is uniform throughout the length of the installed slabs. The sides shall be square to the exposed face unless the slabs are to be set on a radius or other special condition which requires that the joints be cut to fit, but in any case shall be so finished that when the stones are placed side by side no space more than 20 mm [3/4 in] shall show in the joint for the full exposed height.

Liftpin holes in all sides will be allowed except on the exposed face.

SPECIAL PROVISION SECTION 717 ROADSIDE IMPROVEMENT MATERIAL

717.05 Mulch Binder. Change the third sentence to read as follows:

"Paper fiber mulch may be used as a binder at the rate of 2.3 kg/unit [5 lb/unit]."

SPECIAL PROVISION <u>SECTION 102.3</u> EXAMINATION OF GEOTECHNICAL INFORMATION

Add the following paragraphs to this subsection:

Geotechnical Information pertaining to this project has been collected and assembled. Bidders and Contractors are obligated to examine and, if necessary, obtain geotechnical information. Geotechnical Information is available at the Maine Department of Transportation office on Child Street, Augusta, Maine. Geotechnical Information will be provided to interested parties who request this information. Requests for this information should be directed to the Project Manager as outlined in the "Notice to Contractors".

The Department shall not be responsible for Bidders' and Contractors' interpretations of, or estimates or conclusions drawn from, the Geotechnical Information. Data provided may not be representative of the subsurface conditions between the boring locations.

This section does not diminish the duties imposed upon parties in Section 102 or in any other sections.

Town: Jackman Project: NH-1010(600)E

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Date: September 29, 2004

SPECIAL PROVISIONS SECTION 104 Utilities

MEETING

A Preconstruction Utility Conference, as defined in Subsection 104.4.6 of the Standard Specifications **is** thereby called for.

GENERAL INFORMATION

These Special Provisions outline the arrangements that have been made by the Department for coordination of the work and for utility and/or railroad adjustments as defined in Subsection 104.4.6 and 104.4.8 of the Standard Specifications. The following list identifies all known utilities or railroads having facilities presently located within the limits of this project or intending to install facilities during project construction, unless otherwise provided.

Overview

Utility/Railroad	Aerial	Underground	Railroad
Central Maine Power Company	X	None	None
Verizon	X	None	None
Moosehead Enterprises	X	None	None
Jackman Utility District	None	X	None

Temporary utility adjustments are not contemplated unless herein provided for.

The approximate locations of major items of existing and proposed (permanent and temporary) utility plant are shown on the highway construction plans.

All utility crossings over highways will provide not less than 20 feet vertical clearance over existing ground in cut or over finished grade in fill, during construction of this project.

Manholes, valve boxes, service connections, and similar incidental utility plant are to be adjusted in cooperation with work being done by the Contractor.

Unless otherwise provided, utilities will not be required to make underground installations in frozen ground.

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Any times and dates mentioned are estimates only and are dependent upon favorable weather, working conditions, and freedom from emergencies. The Contractors shall have no claim against the Department if they are exceeded.

Utility working days are Monday through Friday, conditions permitting. Times are estimated on the basis of a single crew for each utility.

In all cases, the utilities shall be advised well in advance (generally three weeks) before work, dependent upon other work to be done by the Contractor, in any particular area, is to be commenced by them.

Unless otherwise specified, any underground utility facilities shown on the project plans represent approximate locations gathered from available information. The Department cannot certify the level of accuracy of this data. Underground facilities indicated on the topographic sheets (plan views) have been collected from historical records and/or on-site designations provided by the respective utility companies. Underground facilities indicated on the cross-sections have been carried over from the plan view data and may also include further approximations of the elevations (depths) based upon straight-line interpolation from the nearest manholes, gate valves, or test pits.

All clearing and tree removal which is a part of this contract in areas where utilities are involved must be completed by the Contractor before the utilities can relocate their facilities.

AERIAL

Central Maine Power Company plans to set 10 new poles, run new conductors, remove old poles-estimated time 15 working days.

Moosehead Enterprises plan to transfer their existing cable to the new poles- estimated time 7 working days.

Verizon plan to transfer their existing cables to the new poles- estimated time 25 working days.

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SEQUENCE OF AERIAL WORK

Central Maine Power Company- Install new poles and run new conductors. Moosehead Enterprises- transfer existing cable to new poles.

Verizon- Transfer existing cables to the new poles.

Central Maine Power Company- Remove old poles.

PHASES OF AERIAL WORK

Phase 1: Station 3 + 020 to Station 3 + 250 can be completed first. All of the aerial utilities plan to attach their cables to a temporary pole at Station 3 + 251.1, 1.5 meters Left. This shall be allowed by the utilities to bypass the house on the right, temporarily.

Phase 2: Station 3 + 250 to Station 3 + 380 cannot be completed until the house on the right has been removed.

UNDERGROUND

Jackman Utility District is to include as part of the Department's contract their proposed new water main installment. It shall be the responsibility of the contractor to schedule this work.

CONTRACTOR

Installation of the new water main is included in the Department's contract. This shall be discussed in greater detail at the pre-construction utility meeting.

The installation of the new water main cannot be accomplished until the District has their new easement.

The Contractor is required to provide access for the installation of the new poles. This shall be discussed in greater detail at the pre-construction utility meeting.

The installation of the new water main cannot start until the District has obtained all their new right of way or easement, to be discussed at the pre-construction utility meeting.

Pole List

Station Offset Remarks

1. (Revision on this section to follow.)

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UTILITY SPECIFIC ISSUES:

Any tree removal or tree trimming required within ten feet of the electrical conductors must be done by a qualified contractor. A list of tree removal contractors qualified to remove trees or limbs within ten feet of the electrical conductors may be obtained from the power company.

DIG SAFE

The Contractor shall be responsible for determining the presence of underground utility facilities prior to commencing any excavating work and shall notify utilities of proposed excavation in accordance with M.R.S.A. Title 23 §3360-A, Maine "Dig Safe" System.

SAFE PRACTICES AROUND UTILITY FACILITIES

The Contractor shall be responsible for complying with M.R.S.A. Title 35-A, Chapter 7-A - Sections 751 - 761 Overhead High-Voltage Line Safety Act. Prior to commencing any work that may come within ten (10) feet of any aerial electrical line, the Contractor shall notify the aerial utilities as per Section 757 of the above act.

BLASTING

In addition to any other notice which may be required, the Contractor shall notify an authorized representative of each utility having plant close to the site not later than 3:00 P.M. on the working day (Monday through Friday) before he intends to blast. Notice shall state the approximate time of the blast.

THE CONTRACTOR SHALL PLAN AND CONDUCT HIS WORK ACCORDINGLY.

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CC: Wayne Frankhauser, Jr., Project Manager

SPECIAL PROVISION <u>SECTION 105</u> (Reserved Limit)

The Contractor will not be allowed access to the work within the Limits of Sta. 3+224.6 Rt. to Sta. 2+287.7 Rt (reserved limit) Land and Buildting until after June 1, 2005.

Town: **Jackman** PIN #: **10106.00** Date: 4/9/04

SPECIAL PROVISION SECTION 105

General Scope of Work (Environmental Requirements)

Instream Work shall <u>not</u> be allowed between the dates of 9/15 and 11/15. (Instream work is allowed from 11/16 to 9/14.)

Stream Name(s) with Station #s:Moose River - Sta. 3+110 - 3+160
Special Conditions: Instream work shall be conducted during low flows. See additional Conditions for Department of the Army Programmatic General Permit.

Instream work consists of any activity conducted below the normal high water mark.

During the instream work window restriction, all activities are <u>prohibited</u> (including placement and removal of cofferdams) below the normal high water mark and during high flow conditions, except for the following:

• Work within a sealed and dewatered cofferdam. Maintenance pumping within a sealed cofferdam is also allowed.

No construction activity, whether temporary or permanent, is allowed that completely blocks a river, stream, or brook without providing downstream flow.

The contractor shall abide by all permits and conditions.

SPECIAL PROVISION <u>SECTION 106</u> QUALITY

(Quality Level Analysis- Structural Concrete)

The first formula under Item H under Subsection 106.7.1, Standard Deviation Method, of the 2002 Revision of the Standard Specifications is deleted and replaced with the following. This formula shall apply to structural concrete, only:

Method A: PF = [32.5 + (Quality Level * 0.75)] * 0.01

SPECIAL PROVISION <u>SECTION 107</u> TIME

(Supplemental Liquidated Damages for Fabrication Time)

107.8.1 Fabrication Time.

The Department has budgeted for the following amounts of continuous fabrication/shop inspection for certain Work components:

<u>Element</u>	<u>Time</u>	Supplemental LD
1) Structural Steel	42 calendar days	\$500 per calendar day
2) Precast Deck Panels	14 calendar days	\$500 per calendar day

The Contractor is responsible for requiring their fabricators and suppliers to produce these products for the Work continuously until finished, including any needed actions to correct unacceptable workmanship or materials. If the Department determines that shop inspection beyond these times is required, then the corresponding Supplemental Liquidated Damages will be deducted as they occur from amounts otherwise due the Contractor. The Contractor will be notified by the Department when these times begin and when the allotted time will expire.

If a fabricator or supplier works multiple shifts per day (two shifts, up to twelve hours each per day), the allotted time will be half of the calendar days noted and the LD rate will be the noted amount per shift per calendar day in lieu of per calendar day.

SPECIAL PROVISION <u>SECTION 107</u> TIME

(Limitation of Operations & Supplemental liquidated damages)

The Contractor shall plan and conduct his operations in such a manner that Route 201 has two paved lanes open to traffic at all times except as outlined in section 652.

Should any lane remain closed to traffic beyond the twenty-one days as outlined in section 652 the Contractor shall be assessed supplemental liquidated damages at the rate of Three Thousand Dollars (\$3000.00) per day for each day or portion of the day, computed in accordance with section 652, that the lane remains closed to traffic. This assessment of supplemental liquidated damages will be in addition to the liquidated damages specified in Section 107 of the Standard Specifications.

The Contractor shall plan and conduct his operations in such a manner that two way traffic is shifted from the temporary bridge and onto the new structure no later than November 4th, 2005. The Contractor shall be assessed supplemental liquidated damages at the rate of Three Thousand Dollars (\$3000.00) per calendar day for each day or portion of the day beyond November 4th, 2005 the traffic remains on the temporary structure. This assessment of supplemental liquidated damages will be in addition to the liquidated damages specified in Section 107 of the Standard Specifications.

SPECIAL PROVISION SECTION 107

Prosecution and Progress (Contract Time)

The specified completion date is August 4th, 2006

SPECIAL PROVISION <u>SECTION 202</u> REMOVAL OF STRUCTURES AND OBSTRUCTIONS

Under Section 202.02 of the Standard Specifications, ownership of buildings and all equipment, fixtures, and materials therein shall be interpreted as meaning all equipment, fixtures, and materials that are recognized as real property. Any items that are recognized as personal property are excepted and are reserved to the owner. If the bidder is in doubt as to whether any item not listed is real or personal property, they shall request a determination of the matter prior to date on which bids are to be received.

The following list of items is to be reserved to the property owners and/or occupants of Violet Holden property (land and building) available June 1, 2005. Inman property available immediately.

Reservations

Buildings to be removed under Section 202 - Removing Structures and Obstructions of the contract will be made available to the Contractor as follows:

The Violet Holden Property shall not be available to the contractor until June 1st, 2005. The Inman Property is available to the contractor immediately. Failure by the Maine State Department of Transportation to meet dates of availability may entitle the Contractor to time extension if requested by the Contractor, in writing, such request indicating delays in construction, if any, caused by changes in availability dates.

With the "Notice to Proceed", or when a building becomes available to the Contractor, the Department will designate whether rodent control measures are required or not.

The Contractor shall not remove a building until the Department has certified it to be free of rodents. Should rodent control measures be required, the Contractor shall procure the extermination services as soon as possible. The Department will re-inspect the building within seven days after the extermination services are performed. The cost of extermination services until the building is found to be rodent free will be paid for as a specialty Pay Item under Section 109.3 - Extra Work.

This building may or may not contain asbestos. Prior to any demolition of building(s) please contact the Property Management Section of Program Services for information regarding any asbestos abatement pertinent to the building(s). The Department will bear all expenses incurred in the abatement of any asbestos containing material.

Each building shall be removed promptly after notification that it is free of rodents. All subsequent inspection costs and extermination services necessary to assure that the building is rodent free at time of removal will be at the expense of the Contractor.

Moose River Bridge - Jackman, Maine Project No. NH-1010(600) E & 10516.50 August 5, 2004

SPECIAL PROVISION SECTION 203 EXCAVATION AND EMBANKMENT (CONTAMINATED SOIL AND GROUNDWATER MANAGEMENT)

General. The work under this specification shall be performed in conformance with all the procedures and requirements described herein for the following activities: contaminated soil handling, reuse, temporary stockpiling, transportation, storage and disposal and contaminated water handling, storage, treatment, and disposal. This specification also addresses contaminated soil location, identification and classification. The intent of this specification is to ensure that contaminated soil and/or water encountered during construction will be managed in a manner that protects worker health and safety, public welfare and the environment.

Environmental Site Conditions. The Maine Department of Transportation's Environmental Office (MDOT's-ENV.) has conducted a series of assessments related to the Moose River Bridge Project in Jackman. An initial Phase I Environmental Assessment for the project area was completed to obtain a general understanding of the environmental conditions along the project corridor. Data garnered from this assessment was used to design a Modified, Phase II Contamination Assessment for the project. The primary focus of the assessments was to evaluate the type and extent of subsurface contamination along the project corridor. The Phase I Assessment included a review of relevant Maine Department of Environmental Protection's (MDEP's) and Environmental Protection Agency's (EPA's) databases and field reconnaissance of the project area. Underground utility representatives and other knowledgeable individuals were also queried for further information regarding environmental conditions within the project area. During Phase II, test borings were advanced at select location for investigative purposes. A photo-ionization detector (PID) was used to test soil boring samples from the explorations for volatile organic compound (VOC) concentrations indicative of petroleum products. (See *Identified Areas of Contamination* below). Select samples for laboratory testing were also taken to further aid in evaluating subsurface conditions. The results of these investigations indicate that the subsurface area along a portion of this project is adversely impacted. Data associated with this determination are available for review from the Hydrogeologist at MDOT's Environmental Office in Augusta (207-624-3100).

<u>Identified Area of Contamination.</u> The efforts put forth in the Phase I and Phase II portions of the contamination assessment identified two areas of soil contamination. These areas are designated as **Area A and Area B.**

Area A is defined as along Route 201, in front the residential property at Box #587, in the area of Station 3+070 to 3+110, right of centerline. Historical data indicates that this site was once a gasoline retail facility. Within Area A, poly-bag field samples screened with a photo-ionization detector (PID) calibrated to the appropriate MDEP specified set point, ranged from 0 ppm gasoline equivalents to 122 ppm gasoline equivalents. Contamination detected in this area is most likely related to the past use and storage of petroleum products at the historical gasoline facility. A soil sample was collected from an exploration within Area A to further define the contamination. The sample was collected from an exploration located at approximately Survey Station 3+085, right of centerline, at approximately 1.8 m below ground surface (bgs). The sample was submitted for laboratory analysis for Gasoline Range Organics (GRO) and total lead. GRO and total lead were reported at <2.5 mg/kg and 8.3 mg/kg, respectively. GRO and lead at the levels detected in the soil fall below State remedial guidelines. However, the potential exists that some soils within AREA A may exceed the special waste guidance thresholds for petroleum contamination.

The location of **Area B** is defined as, along Route 201, on the opposite side of the existing highway from Jackman Hardware between approximately Survey Station 3+160 and 3+220. Within **Area B**, poly-bag field samples screened with a photo-ionization detector (PID) ranged from 0 ppm fuel oil equivalents to 52 ppm fuel oil equivalents. This soil contamination may be the remnant of a tractor trailer accident that reportedly resulted in the release of 55 gallons of diesel fuel. A soil sample was collected from an exploration within **Area B** from a depth of approximately 0.43 m bgs to further define the contamination. The sample was submitted for laboratory analysis for diesel range organics (DRO) and semi-volatile organics compounds (SVOCs). Laboratory results failed to find any SVOCs above the established laboratory analytical detection limits. However, DRO was noted at 210 mg/kg. Diesel range organics at this concentration defines the soil as special waste per State remedial guide lines and thus, if encountered, they will require special handling and/or disposal/treatment during construction.

Identifying and Screening Contaminated Soil and Groundwater. Within the contaminated sections designated **Area A and Area B**, excavated soils will be classified by the Engineer (or an MDOT-ENV representative) based on their visual and olfactory evidence of contamination and by photo-ionization detector (PID) field screening. Field screening with a PID shall be performed according to the MDEP "Jar/Poly Bag Headspace Technique" contained in Appendix Q of *Regulations for Registration*, *Installation*, *Operation and Closure of Underground Oil Storage Facilities*, *Chapter 691* (MDEP 12/24/96) and using MDEP's May 1995 calibration set-points.

The excavated soils shall be classified as Group 1, Group 2 or Group 3.

<u>Group 1</u> soils shall have photo-ionization detector (PID) field screening measurements will indicating relative concentrations of VOCs less than or equal 20 parts per million (ppm) as measured in the soil headspace.

Group 2 soils shall have PID field screening measurements indicating VOC concentrations greater than 20 ppm and less than or equal to 1000 ppm and contain no "petroleum saturated" soils or free-phase petroleum product.

<u>Group 3</u> soils shall have PID field screening measurements greater than 1000 ppm or be "petroleum saturated." Analysis to determine "petroleum saturation" shall be performed according to MDEP guidance in *Procedural Guidelines for Establishing Standards for Remediation of Oil Contaminated Soil and Ground Water in Maine* (MDEP, 1/11/95).

<u>Handling and Disposition of Soil Materials</u>. Within **Area A and Area B**, soil material excavated during construction shall be handled as follows:

<u>Group 1</u> soils are not considered contaminated. Thus, special handling and disposal are not required for Group 1 soils.

Group 2 soils shall be placed back into the excavation section of origin. The Contractor shall make every attempt to side cast any Group 2 soils next to their excavation site. Upon completion of the given constructional feature, the Group 2 soils shall be placed back into the excavation. Group 2 materials not handled in this manner shall be considered Surplus Group 2 soils. Surplus Group 2 soils must be disposed of or treated at a facility licensed by the MDEP to accept petroleum contaminated special waste. The Contractor is solely responsible for obtaining the associated permits and approvals for the disposal or treatment of the Surplus Group 2 soils from all relevant Municipal, State, and Federal agencies at no additional cost to the State. Notification shall be given to the Engineer once approval is granted for the acceptance of this material at the off site facility. No removal of Surplus Group 2 soils from the project shall occur without prior approval by the Engineer. If any Surplus Group 2 soils cannot be transported to the pre-approved, properly licensed facility within 8 hours of their excavation, they must be placed in a Temporary Secure Stockpile Area somewhere within the project limits (See Temporary Secured Stockpile Area below).

<u>Group 3</u> soils shall not be excavated without prior approval by the Engineer. The Contractor shall arrange and undertake disposal of all

Group 3 soils at a landfill or treatment facility licensed to accept petroleum contaminated special waste. The Contractor is responsible for all additional testing required by the disposal facility. Group 3 soils that cannot be disposed of within 8 hours of excavation shall be stored in a secured stockpile area. If the Contractor proposes other disposal or treatment options, the Contractor is solely responsible for obtaining the associated permits and approvals from all relevant Municipal, State, and Federal agencies at no additional cost to the State.

The Engineer is responsible for signing any manifests or bills of lading required to transport and dispose of contaminated soil. The Engineer will send all manifests to MDOT, Motor Transport Services, Station 26, Augusta, Maine 04333.

Trench and Underdrain/Stormdrain Design in Contaminated Sections. Between the catch basin proposed at 3+056, right of centerline (just to the south of **AREA A**), to the catch basin proposed at 3+090, right of centerline, solid, Option III, non-perforated pipe shall be used instead of perforated underdrain pipe to help prevent the infiltration and transportation of potentially contaminated groundwater within the underdrain/stormdrain system. The Contractor shall backfill around the pipe and trenches in this section with uncontaminated material. Backfilling of the trench shall be in accordance with Section 206.03. All stones larger than 75 mm (3 inches), frozen lumps, dry chunks of clay or any other objectionable matter shall be removed before backfilling.

Seepage control dikes (SCD) shall be installed roughly every 20 m along the stormwater pipe trench. Given this distribution, the SCD centers should fall at approximately Stations 3+056 (at catch basin outlet, north), 3+076, and 3+090 (at catch basin inlet, south), plus on both sides of any utility trenches that intersect the drainage trench between Stations 3+055 and 3+110.

The SCDs shall consist of a mineral clay material with a liquid limit of equal to or greater than 24 and a natural moisture content of at least 20 percent. The clay should be placed in dry excavations in 150 mm (6 inch) maximum, thick lifts and compacted to 90% of the maximum dry unit weight as determined by AASHTO T99 (Standard Proctor). The SCDs shall be 1.5 meters (5 feet) long, be in intimate contact with the trench floor, trench walls and circumference of the pipe and extend up to the bottom of the road base. The excavated existing road base or similar material may be placed on top of the SCDs. The Contractor shall take care to ensure that no voids or uncompacted soil is left beside or beneath the Option III culvert pipe.

Given the low levels of contamination and the location of the affected soils, it is anticipated that the drainage features as proposed within **Area B** will not be adversely affected. Correspondingly, no contingencies associated with the installation of these features are required.

Secured Stockpile Area. Direct transport of Surplus Group 2 or Group 3 soils to a pre-approved management facility is recommended. However, should the Contractor temporarily store any Surplus Group 2 or Group 3 soils at the site for more than 8 hours following excavation, they must be placed into a properly constructed Temporary Secured Stockpile Area. The Temporary Secured Stockpile Area must be constructed as defined herein and must be approved by the Engineer prior to its use.

Should the Contractor utilize a Secured Stockpile Area, they shall install a continuous one-foot (0.30 m) high compacted soil berm around the Secured Stockpile. The Secured Stockpile shall be placed on a liner of 20-mil polyethylene and securely covered with 20-mil polyethylene. The polyethylene liner and cover shall be placed over the soil berm and be installed to ensure that precipitation water drains directly to the outside of the berm perimeter while leachate from the contaminated soil is retained within the stockpile. The Secured Stockpile and soil berm shall be enclosed within a perimeter of concrete Jersey barriers or wooden barricades. The area within the Jersey barriers (or wooden barricades) shall be identified as a "restricted area" to prevent unauthorized access to the contaminated soils.

<u>Secured Stockpile Area - Materials.</u>

- A. Polyethylene. Polyethylene used for liner in the Secured Stockpile Area shall have a minimum of 20-mil thickness and shall meet the requirements of ASTM D3020.
- B. Common Borrow. Fill used in the construction of the Temporary Secured Stockpile Area soil berm shall consist of Common Borrow and meet the requirements of Section 703.18
- C. Concrete Barriers or Wooden Barricades. Concrete barriers or Wooden Barricades to form the sides of the Temporary Secured Stockpile Area shall meet the requirements of Section 526 or 652.05.

<u>Health and Safety/Right-to-Know.</u> Contractors and Subcontractors are required to notify their workers of the history of the site and contamination that may be present and to be alert for evidence of contaminated soil and groundwater. The Contractor shall notify the Engineer at least three business days prior to commencing any excavation in **Area A or Area B**.

The Contractor shall prepare a site specific Health and Safety Plan (HASP) for its workers and subcontractors who may work in the contaminated area of the site. A Qualified Health and Safety Professional shall complete the HASP. The Qualified Health and Safety Professional will be an expert in field implementation of the following federal regulations:

29 CFR 1910.120 or 29 CFR 1926.65	Hazardous Waste Operations and Emergency Response
29 CFR 1910.134	Respiratory Protection
29 CFR 1926.650	Subpart D - Excavations
29 CFR 1926.651	General Requirements
29 CFR 1926.652	Requirements for Protective Systems

MDOT is voluntarily ameliorating the contamination in **Area A and Area B.** The remedial efforts defined herein have been reviewed and approved by MDEP. Given that this is a voluntary clean up effort approved by a regulatory agency, the OSHA requirements as defined in 29 CFR 1910.120 apply. These requirements mandate that workers and any subcontractors working in the contaminated area shall comply with all the OSHA regulations for Hazardous Waste Operations and Emergency Response including a 40 hour initial hazardous waste operations certification [OSHA 1910.120(e)], annual 8 hour refresher course within the last 12 months, and medical surveillance [OSHA 1910.120 (f)] within the last 12 months.

The contractor shall designate a person to provide direct on-site supervision of the work in the contaminated area. This person shall have the training and medical surveillance under OSHA 1910.120 (e) and (f) respectively, as detailed above and in addition be qualified as a construction Competent Person [OSHA 1926.32 (f) and (l)]. It is the responsibility of this designated person to make those inspections necessary to identify situations that could result in hazardous conditions (e.g., possible cave-ins, indications of failure of protective systems, hazardous atmospheres, or other hazardous conditions), and then to insure that corrective measures are taken.

Work inside contaminated trench sections may be subject to OSHA's permitrequired confined space regulations under 29 CFR 1910.146.

<u>Submittals</u>. The Contractor shall submit a site specific Health and Safety Plan (HASP) to the Engineer at least two weeks in advance of any excavation work on the project.

<u>Health and Safety Monitoring</u>. Within the contaminated area of the project, the Contractor's designated person shall monitor the worker breathing zone for those constituents specified in the Contractor's HASP. The Contractor shall provide all required health and safety monitoring equipment.

<u>Dewatering</u>. Within **Area A and Area B** groundwater is not anticipated during excavation for roadway basing and drainage enhancement. However, should its removal become necessary to complete work it will be treated as "contaminated" water. The Contractor shall inform the Engineer before any dewatering commences. The "contaminated" water shall be pumped into a temporary holding tank(s). The Contractor will be responsible for the procurement of any holding tank(s). Any testing, treatment and/or disposal of the stored, motor fuel contaminated, water shall be undertaken by the Contractor in accordance with applicable Federal, State and local regulatory requirements.

On-Site Water Storage Tanks - Materials. If dewatering within the identified contaminated area becomes necessary the holding tanks used for temporary storage of contaminated water pumped from excavations shall be contamination-free and have a minimum capacity of 7,500 liters (2,000 gallons).

<u>Dust Control</u>. The Contractor shall employ dust control measures to minimize the creation of airborne dust during construction process in potentially contaminated areas. As a minimum, standard dust control techniques shall be employed where heavy equipment and the public will be traveling. These may include techniques such as watering-down the site or spreading hygroscopic salts.

<u>Unanticipated Contamination</u>. If the Contractor encounters previously undiscovered contamination or potentially hazardous conditions related to contamination, the Contractor shall suspend work and secure the area. The contractor will then notify the Engineer immediately. These potentially hazardous conditions include, but are not limited to, buried containers, drums, tanks, "oil saturated soils", strong odors or the presence of petroleum sufficient to cause a sheen on the groundwater. The area of potential hazard shall be secured to minimize health risks to workers and the public and to prevent a release of contaminants into the environment. The source of the suspected contamination will be evaluated by the Engineer (or MDOT's-ENV representative). As appropriate, the Engineer will notify the Maine Department of Environmental Protection's Response Services Unit in Bangor and MDOT's Environmental Office. The Jackman Fire Department must also be notified prior to removal of buried storage tanks and associated piping. The Contractor will evaluate the impact of the hazard on construction, amend the HASP if necessary, and with the Engineer's approval recommence work in accordance with the procedures of this Special Provision.

<u>Method of Measurement</u>. There will be no measurement for identification and environmental screening of contaminated soil material (this will be done by the Engineer or MDOT-ENV representative).

Measurement for the development of a Health and Safety Plan (HASP) and providing health and safety equipment and personnel shall be by lump sum.

Measurement of the off site treatment or disposal of Surplus Group 2 and all Group 3 soils will be by the Mega Gram of Special Excavation.

There will be no measurement for construction of a Temporary Secured Stockpile Area. Construction of a Temporary Secured Stockpile Area, if necessary, is considered incidental to project construction. There will be no measurement for hauling Surplus Group 2 material or Group 3 soils to the Temporary Secure Stockpile area or placement and removal of Surplus Group 2 or Group 3 soils in or out of the Temporary Secure Stockpile area. All hauling and any subsequent management/placement of contaminated soils are considered incidental to project construction.

There will be no measurement for additional laboratory testing of contaminated soil that is required by the landfill or treatment facility. Testing is incidental to the disposal of Special Excavation.

Measurement for the following items shall be according to Subsection 109:04 ("Change Order"/Force Account): any necessary contaminated water holding tank(s); and treatment or disposal of any contaminated ground water.

<u>Basis of Payment</u>. There will be no payment for the identification and environmental screening of contaminated soil material (this will be done by the Engineer or MDOT-ENV representative).

Payment for the development of a Health and Safety Plan (HASP) and providing health and safety equipment and personnel shall be by the lump sum

Payment for off site disposal or treatment of contaminated Surplus Group 2 and all Group 3 soils at a MDEP licensed facility shall be by the Mega Gram of Special Excavation.

There will be no payment for the construction of the Temporary Secured Stockpile Area or hauling/management/placement of contaminated soils to the Temporary Secured Stockpile Area. The Temporary Secured Stockpile Area shall be considered incidental to project construction.

Payment for the following items shall be according to Subsection 109:04 ("Change Order"/Force Account): any necessary contaminated water holding tank(s); and treatment or disposal of any contaminated ground water.

Pay Item Pay Unit

JACKMAN NH-1010(600)E MOOSE RIVER BRIDGE 1 OCTOBER 2004

SPECIAL PROVISION <u>SECTION 203</u> EXCAVATION AND EMBANKMENT (Dredge Materials)

<u>Description</u>: Dredge Material (See MDOT Standard Specifications § 101.2) is regulated as a Special Waste.

This reach of the Moose River is a Class A high-quality surface water feature; therefore, the Beneficial Use of Dredge Material from the Moose River is exempt from Beneficial Use Permits

CONSTRUCTION REQUIREMENTS

<u>Management and Disposal:</u> The contractor shall ensure that all Dredge Material excavated from the Moose River is Beneficially Used in the area(s) specified by MDOT.

Method of Measurement: Dredge Material will not be measured for payment.

<u>Basis of Payment:</u> Dredge Material Beneficially Used will not be paid for directly, but shall be considered incidental to related excavation items. Payment for these items shall be considered to be full compensation for excavation, dewatering, managing, transporting, and placement.

Jackman NH-1010(600) E & 10516.50 September 24, 2004

SPECIAL PROVISION SECTION 403 HOT MIX ASPHALT OVERLAY

Desc. of Course	Grad. Design	Item Number	Bit Cont. % of Mix	Total Thick	No. Of Layers	Comp. Notes
Approach Travel Way						
Wearing	12.5 mm	403.208	N/A	40 mm	1	4,8,12
Base	12.5 mm	403.213	N/A	40 mm	1	4,8
Base	19 mm	403.207	N/A	100 mm	2	4,8
		Approac	h Shoulders &	& Parking	<u>Areas</u>	
Wearing	12.5 mm	403.208	N/A	40 mm	1	4,8,12
Base	12.5 mm	403.213	N/A	40 mm	1	4,8
Bridge Deck						
Wearing	9.5 mm	403.210	N/A	40 mm	1	2,4,8
Base	9.5 mm	403.210	N/A	40 mm	1	2,4,8
Drives and sidewalks						
Wearing	9.5 mm	403.209	N/A	50 mm	1	2,3,9,10

COMPLEMENTARY NOTES

- 2. The density requirements are waived.
- 3. The design traffic load for this mix shall be less than 0.3 million ESALs.
- 4. The design traffic level for mix placed shall be 0.3 to < 3 million ESALs.
- 8. Section 106.6 Acceptance, (2) Method B
- 9. Section 106.6 Acceptance, (2) Method C
- 10. A "FINE" 9.5 mm mix with a gradation above or through the restricted zone shall be used for this item.
- 12. A mixture meeting the requirements of 9.5 mm hot top asphalt may be used at the option of the contractor.

Tack Coat

A tack coat of emulsified asphalt, RS-1 or HFMS-1, Item #409.15 shall be applied to any existing pavement at a rate of approximately $0.08 \, \text{L/m}^2$, and on milled pavement approximately $0.2 \, \text{L/m}^2$, prior to placing a new course. A fog coat of emulsified asphalt shall be applied between shim / intermediate course and the surface course, at a rate not to exceed $0.08 \, \text{L/m}^2$.

Tack used between layers of pavement will be paid for at the contract unit price for Item 409.15 Bituminous Tack Coat.

SPECIAL PROVISION <u>SECTION 502</u> STRUCTURAL CONCRETE (Quality Level Analysis)

The second sentence of 502.01, Description, of the 2002 Revision of the Standard Specifications is deleted and replaced by the following:

For METHOD A Statistical Acceptance, or METHOD B Statistical Acceptance, the work shall conform to the Contractor's approved Quality Control (QC) Plan and Quality Assurance (QA) provisions, in accordance with these Specifications and the requirements of Section 106 - Quality.

TABLE 1, under Subsection 502.05, Composition and Proportioning, of the 2002 Revision of the Standard Specifications is deleted and replaced by the following:

TABLE 1- Methods A and B

Concrete	Compressive		Permeability		Entrained		Notes
CLASS	Strength		(COULOMBS)		Air		
	(PSI)		_		(%)		
	LSL	USL	LSL	USL	LSL	USL	
S	2,900	N/A	N/A	N/A	6.0	8.5	1, 5
A	4,350			2,400	6.0	8.5	1,2,5,6
P					4	6	1,2,3,4,5
LP	5,075			2,000	6.0	8.5	1,2,5,6
Fill	2,900	N/A	N/A	N/A	N/A	N/A	6

Subsection 502.0503, Quality Assurance METHOD B, of the 2002 Revision of the Standard Specifications is deleted and replaced by the following:

<u>502.0503</u> Quality Assurance METHOD B The Department will determine the acceptability of the concrete through a quality assurance program.

The Department will take Quality Assurance samples a minimum of once per sublot on a statistically random basis. Quality Assurance tests will include compressive strength, air content and permeability.

Concrete sampling for quality assurance tests will be taken at the discharge point, with pumped concrete sampling taken at the discharge end of the pump line.

Lot Size A lot size shall consist of the total quantity represented by each class of concrete in the Contract, except in the case when the same class of concrete is paid for under both lump sum items and unit price items in the Contract; in this case, the lump sum item quantities shall comprise 1 lot and the unit price item quantities shall comprise a separate lot. A lot shall consist of a minimum of 3 and a maximum of 10 sublots. If a lot is comprised of more than 10 sublots, sized in accordance with Table #3, then this quantity shall be divided equally into 2, or more, lots such that there is a minimum of 3 and a maximum of 10 sublots per lot. If there is insufficient quantity in a lot to meet the recommended minimum sublot size, then the lot shall be divided into 3 equal sublots.

<u>Sublot Size, General</u> The size of each sublot shall be determined in accordance with Table #3. The Resident may vary sublot sizes based on placement sizes and sequence.

Sublot Size, Unit Price Items Sublot sizes will initially be determined from estimated quantities. When the actual final quantity of concrete is determined: If there is less than one-half the estimated sublot quantity in the remaining quantity, then this quantity shall be combined with the previous sublot, and no further Acceptance testing will be performed; if there is more than one-half the estimated sublot quantity in the remaining quantity, then this quantity shall constitute the last sublot and shall be represented by Acceptance test results. If it becomes apparent part way through a lot that, due to an underrun in quantity, there will be an insufficient quantity of concrete to comprise three sublots, then the Resident may adjust the sizes of the remaining sublots and select new sample locations based on the revised estimated quantity of concrete remaining in the lot.

<u>Sublot Size, Lump Sum Items</u> Each lot shall be divided into sublots of equal size, based on the estimated quantity of concrete.

TABLE 3

Quantity m ³ [cy]	Recommended Sublot S	Size m³ [cy]
0-400 [0-500]	40 [50]	
401-800 [501-1000]	60 [75]	
801-1600 [1001-2000]	80 [100]	
1601 [2001]or greater	200 [250]	

Determination of the concrete cover over reinforcing steel for structural concrete shall be made prior to concrete being placed in the forms. Bar supports, chairs, slab bolsters, and side form spacers shall meet the requirements of Concrete Reinforcing Steel Institute (CRSI) Manual of Standard Practice, Chapter 3 Section 2.5 Class 1, Section 2.6 Class 1A, or Section 4. All supports shall meet the requirements for type and spacing as stated in the CRSI Manual of Standard Practice, Chapter 3. Concrete will not be placed until the placing of the reinforcing steel and supports have been approved by the Resident. If the Contractor fails to secure Department approval prior to placement, the Contractor's failure shall be cause for removal and replacement at the Contractor's expense. The Contractor shall notify the Resident, at least 48 hours prior to the placement, when the reinforcing steel will be ready for checking. Sufficient time must be allowed for the checking process and any needed repairs.

Evaluation of materials will be made using the specification limits in Table 1.

Compressive strength tests will be completed by the Department in accordance with AASHTO-T22 at \geq 28 days, except that no slump will be taken. The average of two concrete cylinders per sublot will constitute a test result and this average will be used to determine the compressive strength for pay adjustment computations.

Testing for Entrained Air in concrete, at the rate of one test per sublot, shall be in accordance with AASHTO T152.

Rapid Chloride Permeability test specimens will be completed by the Resident in accordance with AASHTO T-277 at an age \geq 56 days. Two 100 mm x 200 mm [4 in x 8 in] cylinders will be taken per sublot placed.

Surface Tolerance, Alignment and Trueness, Plumb and Batter, and Finish will be measured as described in Section 502.0502.

Rejection by Resident For an individual sublot with a calculated pay factor of less than 0.80, the Department will, at its sole discretion:

- <u>A.</u> Require the Contractor to remove and replace the entire affected placement with concrete meeting the Contract requirements at no additional expense to the Department, or
- <u>B.</u> Accept the material, at a reduced payment as determined by the Department. (See also Section 502.191)

For a lot in progress, the Contractor shall discontinue operations whenever one or more of the following occurs:

- <u>A.</u> The pay factor for any property drops below 1.00 and the Contractor is taking no corrective action
- <u>B.</u> The pay factor for any property is less than 0.90
- C. The Contractor fails to follow the QC Plan

Paragraph E, under Subsection 502.18, Method of Measurement, of the 2002 Revision of the Standard Specifications is deleted and replaced by the following:

E. For the purposes of making pay adjustments under Method A, quantities of lots and sublots shall be determined as outlined under Section 502.0502 - Quality Assurance Method A, Section 502.0503- Quality Assurance Method B, and under Section 502.19 - Basis of Payment.

The first sentence in the seventh paragraph of Subsection 502.19, Basis of Payment, of the 2002 Revision of the Standard Specifications is deleted and replaced by the following:

Pay adjustments will be made only for cast-in-place concrete accepted under Method A and Method B.

Subsection 502.191, Pay Adjustment for Compressive Strength, of the 2002 Revision of the Standard Specifications is deleted and replaced by the following:

<u>502.191 Pay Adjustment for Compressive Strength</u> Compressive strength tests will be completed by the Department in accordance with AASHTO-T22 at 28 days.

Pay factors (PF) for pay adjustments for compressive strength will be determined using the Quality Level Analysis as specified in Section 106.

If three consecutive tests fail to meet the below listed strength requirements, the Contractor shall submit remedial actions acceptable to the Department, at no additional cost. These remedial actions shall be taken until the source of the problem can be identified and corrected or new trial batches can be performed. When the average of three consecutive tests falls to less than 1.0 MPa [150 psi] above the specified strength or any single test more than 1.4 MPa [200 psi] below the specified strength, the Resident will notify the Contractor to make corrective changes in the materials, mix proportions, or in the concrete manufacturing procedures before placing additional concrete of the same class. Such changes shall be subject to the approval of the Resident.

Subsection 502.192, Pay Adjustment for Chloride Permeability, of the 2002 Revision of the Standard Specifications is deleted and replaced by the following:

<u>502.192 Pay Adjustment for Chloride Permeability</u> Pay factors (PF) for pay adjustments for Chloride Permeability will be determined using the Quality Level Analysis as specified in Section 106.

Values greater than 4000 coulombs shall be subject to rejection and replacement at no additional cost to the Department.

Subsection 502.193, Pay Adjustment for Air Content, of the 2002 Revision of the Standard Specifications is deleted and replaced by the following:

<u>502.193 Pay Adjustment for Air Content</u> Pay factors (PF) for pay adjustments for air content will be determined using the Quality Level Analysis as specified in Section 106.

The following subsection is added to the 2002 Revision of the Standard Specifications:

502.195 Pay Adjustments for Compressive Strength, Chloride Permeability and Air Content The Composite Pay Factor (CPF) for each lot of concrete shall be computed as follows:

The pay adjustment for each lot of concrete shall be computed as follows:

Lot Pay Adjustment = $P \times CPF \times Lot Size$

There will be no positive pay adjustments for Method B Concrete.

SPECIAL PROVISION <u>SECTION 502</u> STRUCTURAL CONCRETE

(QC/QA Acceptance Methods)

CLASS OF	ITEM	DESCRIPTION	P	METHOD
CONCRETE	NUMBER			
S	501.701	Pipe pile Concrete		В
A	502.219	Structural Concrete Abutments and	\$680	A
		Retaining Walls		
A	502.26	Structural Concrete Roadway and Sidewalk	\$680	A
		Slabs on Steel Bridges		
A	502.239	Str. Concrete Piers	\$680	A
A	502.261	Structural Concrete Roadway and Sidewalk	\$660	A
A	502.31	Structural Concrete Approach Slabs		В
A	835.15	Boat Ramp		В
LP	502.49	Structural Concrete Curbs and Sidewalks	\$780	A
LP	526.323	Texas Railing	\$780	A
Fill	609.50	Concrete Base for Curbing		В

P values listed above reflect the price per cubic meter for all pay adjustment purposes.

SPECIAL PROVISION SECTION 506 PROTECTIVE COATING - STEEL

<u>506.01</u> <u>Description</u>. This work shall consist of preparation of steel surfaces and applying protective coating to steel substrate in accordance with the Plans and this Specification.

<u>506.02 Materials</u>. Materials shall comply with the requirements in the respective Subsections of Section 506.

<u>506.03 Submittals.</u> At least thirty days prior to the start of work, the Contractor shall submit for review by the Department, materials list, containment details, and other such details as described within the plans and the respective subsections of this specification. Work shall not commence until review of submittals is satisfactory.

The Contractor shall provide at least fourteen days notice prior to the start of work.

<u>506.04 General Requirements</u>. Requirements for the containment system or the type of protective coating to be furnished are as follows:

Galvanizing Subsections 506.10 through 506.19 Zinc Rich Coating System Subsections 506.20 through 506.29

506.05 Inspection. Quality Control (Q.C.) is the responsibility of the Contractor. The Quality Control Inspector (Q.C.I.) shall inspect all aspects of the work and shall supervise required testing. The Q.C.I. shall record measurements and test results in a Job Control Record (JCR). The Q.C.I. shall reject materials and workmanship that do not meet contract requirements. The Contractor may perform testing in addition to the minimum required. The results of all testing shall be documented and made available to the Quality Assurance Inspector (Q.A.I.).

The JCR shall include the following, as applicable:

Type of application equipment
Surface preparation - cleanliness and anchor profile
Environmental conditions - dew point, relative humidity, temperature
Coating lot number, date of manufacture and shelf life
Manufacturer's certification of conformance
Name(s) of applicator(s)
Dry Film Thickness (DFT)
Cure data

Quality Assurance (Q.A.) is the prerogative of the Engineer. The Q.A.I. will ensure that the Q.C. Department is performing properly, verify documentation, periodically inspect workmanship and witness testing. Q.A. testing deemed necessary by the Engineer in addition to the minimum testing requirements will be scheduled to minimize interference with the production schedule.

The Contractor shall have the most recent edition of the following references available at the job site when work is being done:

- 1. Steel Structures Painting Council's Steel Structures Painting Manual, Volumes 1 and 2 (Good Painting Practice and Systems and Specifications).
 - 2. SSPC Vis 1, Visual Standard for Abrasive Blast Cleaned Steel

Test methods - Unless otherwise provided in this section, the following test methods shall be used:

Surface profile measured in accordance with ASTM Standard D4417 Method C (replica tape) and ASTM Standard D4417A (angularity profile)

Surface Cleanliness, SSPC Vis 1 Dry film thickness, SSPC PA-2

<u>506.05.1 Inspector's Qualifications</u> Personnel who perform QC shall have sufficient training and experience to ensure compliance with requirements. Minimum qualifications shall be in accordance with industry standards or as stated in the specifications.

<u>506.06 Inspector's Authority</u>. The Q.A.I. will have the authority to reject material or workmanship that does not meet the contract requirements. The acceptance of material or workmanship by the Q.A.I. will not prevent subsequent rejection, if found unacceptable.

<u>506.07 Rejections</u>. Rejected material and workmanship shall be corrected or replaced by the Contractor in accordance with Subsection 106.8.2.

506.08 Facilities for Inspection. The Contractor shall provide a private office at the coating site for the Q.A.I. The office shall have an area not less than 9.3 m² (100 ft²) and shall be in close proximity to the work. The office shall be climate controlled to maintain the temperature between 18° C (65° F) and 30° C (85° F), lighted and have the exit(s) closed by a door(s) equipped with a lock and 2 keys which shall be furnished to the Q.A.I. The office shall be equipped with a desk or table having a minimum size of 1200 by 760 mm (48 in. By 30 in.), 2 chairs, a two-line telephone, telephone answering machine, line data port, plan rack and 2-drawer letter size file cabinet with a lock and 2 keys which shall be furnished to the Inspector(s).

The facilities and all furnishings shall remain the property of the Contractor upon completion of the work. Payment for the facilities, heating, lighting, telephone installation, basic monthly telephone charges and all furnishings shall be incidental to the contract.

<u>506.09 Qualification</u>. Shop-applied zinc-rich coating systems shall be applied in facilities holding a current AISC Sophisticated Paint Endorsement (P) or has been qualified in accordance with SSPC QP3-Standard Procedure for Evaluating Qualifications of Shop Painting Applicators.

Thermal Spray Coating (TSC), including sealers and top coating, fusion bonded coatings and hotdip galvanizing shall be applied in facilities with an minimum of five years documented experience of satisfactory performance.

HOT-DIP GALVANIZING

506.10 Description. Hot-dip galvanizing shall meet the requirements of AASHTO M 111 (ASTM A 123). The minimum average coating thickness grade shall conform to Table 1. The frequency of testing shall be in accordance with Section 6. The choice of the test method is the prerogative of the Contractor.

Certification and written test results shall be provided in accordance with Section 10 of AASHTO M 111 (ASTM A 123).

<u>506.11 Surface Preparation</u>. Steel substrate shall be abrasive blast cleaned to a minimum of SSPC SP 6/NACE 3 prior to galvanizing.

<u>506.12 Repairs</u>. Repairs to galvanizing shall be in accordance with Annex A1 or A3 of ASTM A 780. Zinc-rich paints for repair may only be used with prior approval of the Engineer.

<u>506.13 Topcoat Galvanized Surfaces</u> The areas of galvanized surfaces to receive a topcoat will be described on the plans or in the specifications.

Chromate quenching or other types of quenching after galvanizing will not be allowed.

Hot Dip Galvanized surfaces to be painted shall be smooth and have a uniform zinc thickness, free of runs or heavy buildup.

Surfaces shall be cleaned to SSPC-SP 1 using either the solvent or steam cleaning alternatives; an alkali alternative may be used provided that the PH is 11 or less. All surfaces shall be prepared in accordance with SSPC-SP 7/NACE No. 4 Brush-Off Blast Cleaning. The surface shall have an anchor profile within the paint manufacturer's recommendations. The blast media shall be a mineral slag or organic product. Steel grit will not be allowed.

Topcoat material shall be any topcoat product from a listed NEPCOAT QPL system. The finish topcoat color shall be dark green and shall closely match in color to the "holophane green" or factory green of the decorative light poles.

Surfaces shall be prepared and paint applied in an enclosed facility protected from inclement weather. Paint shall be stored, handled mixed and applied in accordance with manufacturer's published recommendations and in accordance with SSPC PA 1. Primer, if required, shall be as recommended by the topcoat manufacturer.

Touch up shall be in accordance with the coating manufacturer's recommendations. If repairs larger than 22,500 mm² (6 in.²) are made on the top coat of any one piece; the entire piece shall be re-coated after repairs are completed.

506.14 thru 506.19 Vacant.

ZINC-RICH COATING SYSTEMS

<u>506.20</u> Description. Work shall consist of application of a three-coat, zinc-rich coating system in accordance with the Plans and this Specification.

<u>506.21 Materials</u>. Coatings systems shall be from the Northeast Protective Coating Committee (NEPCOAT) Qualified Products List (QPL). The list may be found through the Department's Web page (http://www.state.me.us/mdot).

The Contractor shall provide the paint batch description, lot number, date of manufacture, shelf life and the manufacturer's published storage requirements to the Engineer. In addition, the Contractor shall provide the manufacturer's published instructions for application of each coat of the coating system including equipment, surface preparation, anchor profile, mixing, thinning, application, cure time for the entire range of allowable environmental conditions, dry film thickness (DFT) and recoat time.

The finish topcoat color shall be dark green and shall closely match in color to the "holophane green" or factory green of the decorative light poles.

The Contractor shall sample each batch of coating to be applied; sampling shall be witnessed by the QAI. Samples shall be sent to and tested by the lab that originally performed the NEPCOAT QPL qualification tests. Samples shall be tested for unit weight and infrared refractory (IR) results; the lab shall evaluate the sample(s) and render an opinion of relative comparison with the original NEPCOAT QPL test. Report(s) of the test results shall be furnished to the Resident. Material that does not compare favorably with the original tests is not acceptable for use. Sampling and testing costs will be borne by the Contractor.

506.22 Limits of work. Locations to be painted shall be as specified herein and on the plans

506.23 Surface Preparation. Prior to abrasive blast cleaning, all corners exposed in the assembled product shall be rounded to approximately a 3 mm radius. A series of tangents to the approximate radius will be considered as rounded. The Contractor shall prepare a plate approximately 50 mm x 300 mm with the appropriate rounded corner. The QCI and QAI shall agree upon the acceptability of the corner preparation and the plate shall become the Job Standard. The plate shall remain the property of the Contractor.

Surfaces to be coated shall be abrasive blast cleaned to meet the coating manufacturer's published requirements. SSPC VIS 1 shall be used to determine acceptable cleanliness. The QCI and QAI shall evaluate the first piece using VIS 1 as a comparator. No further blast cleaning shall be done until the QCI and QAI agree upon the acceptable Job Standard for cleanliness. If more than one method of abrasive blast cleaning is used (e.g. centrifugal blast and compressed air), the acceptable Job Standard shall be established for each method. At the Contractor's option, a sample piece may be abrasive blast cleaned and sealed with a clear coating to preserve the surface preparation and the sample piece may be used as a comparator to establish the agreed upon Job Standard.

After abrasive blast cleaning, the surface shall be visually inspected for fins, tears, delaminations and other discontinuities. Fins, tears and other discontinuities shall be removed with a grinder or other suitable power tool and the area shall be blended at a slope of approximately 1:20. The affected area(s) shall be abrasive blast cleaned to develop an acceptable anchor profile.

The anchor profile shall meet the requirements of the coating manufacturer's published recommendations. The blast media shall contain enough grit to provide an angular anchor profile. The anchor profile shall be measured in accordance with ASTM D 4417 Method C. If the anchor profile fails to meet the minimum requirements, the Contractor shall re-blast the substrate until the minimum required anchor profile is achieved. If the anchor profile exceeds the maximum allowed in the manufacturer's published recommendations, the substrate may only be coated after it has been brought within manufacturer's recommendations.

The QCI shall measure the anchor profile of the substrate on each plane of the first piece and each additional piece with a significant change in size or geometry. The QAI will witness the testing. After it has been established to the satisfaction of the Engineer that the abrasive blast equipment is capable of providing uniform, acceptable surface preparation, a diminished degree of testing shall be agreed upon by the QCI and QAI.

If there is a significant change in surface cleanliness or anchor profile due to blast media degradation or other reason, the Contractor shall cease the blast operation until corrective action is taken.

If compressed air is used for abrasive blast cleaning, a blotter test shall be performed in accordance with ASTM D 4285 at the beginning of each shift and at any other time the QAI directs it. The QCI shall be present to witness the blotter test.

The allowable time between abrasive blast cleaning and primer application shall not exceed the manufacturer's published recommendations or eight hours, whichever is less.

<u>506.24 Application</u>. Thinning and mixing of coatings shall be in conformance with the manufacturer's published instructions. Thinner shall be measured using a graduated cup or other container that clearly indicates the amount of thinner being added. Mixing shall be done using the method, equipment and for the amount of time recommended by the coating manufacturer.

Coating equipment including mixers, hoses, tip size and guns shall meet the manufacturer's published requirements. Application technique shall be in accordance with the manufacturer's published instructions.

Primer, intermediate coat and topcoat shall be applied in accordance with the manufacturer's published recommendations and SSPC PA 1. The environmental conditions in the immediate vicinity of the steel to be coated shall be within the ranges in the manufacturer's published requirements during the coating operation and during the curing period. Coating shall be applied in a neat and workmanlike manner; surfaces shall be free of sags, runs, drips or other film defects.

Seal all gaps that are 3 mm (1/8 inch) or larger, between abutting surfaces, prior to coating, with a paintable caulk as recommended by the coating manufacturer.

Environmental conditions shall be measured by the QCI in the immediate vicinity of the steel to be coated. The QAI may perform environmental testing in addition to the testing performed by the QCI. If there are significant differences between the test results, the differences shall be resolved or explained to the satisfaction of the Engineer prior to coating application. The results of the environmental testing shall be recorded in the JCR.

Corners, fasteners, welds and inaccessible locations shall be striped in accordance with SSPC PA 1. The striping shall extend a minimum of 25 mm (1 inch) from each edge. Striping will not be required on intermediate and topcoat; however, the Contractor shall meet the minimum DFT requirements on all surfaces.

Recoat time shall be in accordance with the manufacturer's published requirements for the environmental conditions at the time of application and cure. If the coating is contaminated with dust, debris, over spray or other deleterious material, the surface shall be solvent cleaned in

accordance with SSPC SP 1 immediately prior to recoating. Other methods of cleaning may be used if approved by the Engineer.

The Contractor shall take adequate measures during coating and curing operations to prevent contamination of surfaces with overspray, dust, or other contaminates.

The QAI shall be given ample notice in order to inspect the product prior to coating, recoating or removal of paint from the area. Ample notice shall be as agreed upon between the Q.A.I. and the Q.C.I. Substrates that are primed or surfaces that are recoated without notification of the QAI shall be rejected and no further coating shall be done on the piece. Coating applied without notification of the QAI will be investigated by destructive and non-destructive testing as directed by the Engineer and by a review of the JCR. The Engineer may reject, conditionally accept or accept the coating based on documentation and test results. Rejected coating shall be removed and re-applied. Conditionally accepted coatings shall be made acceptable as directed by the Engineer. The cost of additional testing and repairs shall be borne by the Contractor.

506.25 Dry Film Thickness. Dry film thickness shall be measured in accordance with SSPC PA 2. The results shall be documented in the JCR. The JCR documentation shall include the actual measurements, spot average and the location(s). Each piece or area presented for acceptance, regardless of size shall be considered a separate structure for purposes of determining the number of readings to be taken except that large quantities of small parts and/or secondary framing members coated at the same time may be measured at a lesser frequency when directed by the Engineer. When random DFT testing of a large quantity of small parts and/or secondary framing members results in unacceptable DFTs, the Contractor shall have the option of measuring and documenting the DFT of each piece or removing the coating and/or recoating all pieces represented in the production lot.

Coating thickness that does not comply with the manufacturer's recommendations shall be corrected prior to successive coating or acceptance.

506.26 Repairs. Damaged or unacceptable coatings shall be repaired. Damaged areas shall be prepared in accordance with the manufacturer's published instructions or as directed by the Engineer. Damaged or unacceptable coatings shall be repaired using the same coating removed and prepared for repair. Environmental conditions, cure times and DFTs shall be in accordance with manufacturer's published directions for the coating being applied. Repairs to topcoat shall result in a uniform gloss and color match. The Engineer shall have final authority concerning acceptable appearance.

If repairs larger than 22,500 mm² (6 in.²) are made on the topcoat of fascia beam; the entire beam shall be re-coated after repairs are completed. Coat thickness shall not exceed the manufacturer's published recommendations.

506.27 Handling and Storage. The coating shall be adequately cured before handling but under no circumstances shall the product be handled before the coating has achieved the manufacturer's published minimum cure time. Coated steel members shall be handled in a manner to avoid damage to the coating. Members shall be lifted and moved using non-metallic slings, padded chains and beam clamps, softeners or other non-injurious methods. Material shall be stored, both at the coating facility and in the field, in a manner that prevents damage to the coating.

Damage to the coating that is discovered after the product is loaded for shipment to the job site shall be documented by the QCI. Repairs shall not be made unless the damaged area is repaired in accordance with Subsection 506.26. Repairs that cannot be acceptably done on the truck shall be done in the shop or in the field at the Contractor's option.

MEASUREMENT and PAYMENT

<u>506.90 Basis of Payment</u>. The entire cost of protective coating shall be considered incidental to the bridge component to which it is applied.

SPECIAL PROVISION <u>SECTION 510</u> SPECIAL DETOURS

Section 510, Special Detours of the Standard Specifications is amended as follows:

<u>510.03 Vehicular and Pedestrian Traffic Not Separated:</u> Paragraph 5, subsection e. the eighth paragraph is revised to read as follows:

<u>e. Approach Road Surface</u> The approach road surface shall be paved with a minimum of 75 mm hot mix asphalt pavement, and shall be maintained in a smooth condition.

SPECIAL PROVISION SECTION 535

Precast, Prestressed Concrete Superstructure

Section 535, Precast, Prestressed Concrete Superstructure of the Standard Specifications is amended as follows:

535.07 Erection of Precast Deck Panels: Paragraph 2, is revised to read as follows:

After precast deck panels have been erected, adjusted and sealed, the void between the top of the girder and the bottom of the panels shall be filled with a non-shrink, flowable cementitious grout or concrete with a design compressive strength of not less than that required for the deck concrete above. This is the material that is referred to in Standard details 502(09) and 502(10) as "non-shrink mortar" and shall not be placed any higher than 12 mm above the bottom of the precast deck panels. The course aggregate shall be the maximum size practical for those areas where the gap between the top flange and the bottom of the deck panel exceeds 20 mm. For those areas where the gap between top flange and the bottom of the deck panel is less than 20 mm then the grout shall consist of one of those products on the Maine Department of Transportation's list of pre-qualified grout materials for keyways, and the grout shall be mixed placed and cured in accordance with the manufacturer's published recommendations. Vent holes shall be provided at 1 meter intervals to prevent air lock. Once the grout has cured to sufficient strength any screw type leveling jacks within the deck panels shall be turned back to distribute the dead load of the panel to the grout.

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SPECIAL PROVISION SECTION 608

DETECTABLE WARNINGS (Vitrified Polymer Composite)

<u>Description</u>: This Special Provision describes furnishing and installing cast-in-place tactile modules with truncated domes on concrete curb ramps at the locations shown in the plans and in accordance with the plans or as established by Project Personnel.

<u>Construction Requirements:</u> All base courses and joints shall conform to the applicable subsections of Division 700 of the Standard Specifications. All curb ramp reconstruction shall conform to section 608 Reconstruct Existing Pedestrian Ramp.

Materials: The Contractor shall provide new, Vitrified Polymer Composite (VPC) cast-in-place tiles. They shall be of an epoxy polymer composition with an ultraviolet stabilized coating employing aluminum oxide particles in the truncated domes. The tile shall incorporate an in-line dome pattern of truncated domes 5 mm in height, 23 mm diameter at the base, and 10 mm diameter at top of dome spaced 60 mm nominal as measured on a diagonal and 43 mm nominal as measured side by side. For wheelchair safety the field area shall consist of a non-slip surface with a minimum of 40 - 90° raised points 1 mm high, per 645 mm² (1 square inch); "Armor-Tile" as manufactured by Engineered Plastics Inc., Tel: 800-682-2525, or approved equal. The color shall be Red as manufactured by "Armor-Tile".

(1) Dimensions: Tile Assemblies shall be held within the following dimensions and tolerances:

Length and Width: : 610 mm x 1220 mm nominal

Depth : $35 \text{ mm} \pm 5\% \text{ max}$.

Face Thickness : $4.75 \text{ mm} \pm 5\% \text{ max}$.

Warpage of Edge : $\pm 0.5\%$ max.

- (2) Water Absorption of Tile when tested by ASTM-D 570 not to exceed 0.35%.
- (3) Slip Resistance of Tile when tested by ASTM-C 1028 the combined wet/dry static coefficient of friction not to be less than 0.90 on top of domes and field area.
- (4) Compressive Strength of tile when tested by ASTM-D 695-91 not to be less than 124 MPa (18,000 psi.)
- (5) Tensile Strength of Tile when tested by ASTM-D 638-91 not to be less than 69 MPa (10,000 psi.)

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- (6) Flexural Strength of Tile when tested by ASTM C293-94 not to be less than 165 MPa (24,000 psi.)
- (7) Chemical Stain Resistance of Tile when tested by ASTM-D 543-87
- (8) Accelerated Weathering of Tile when tested by ASTM-G26-95 for 2000 hours shall exhibit the following result no deterioration, fading or chalking of surface of tile.

Samples and Submittals:

Product Data: Submit manufacturer's literature describing products, installation procedures and routine maintenance.

Samples for Verification Purposes: Submit two (2) tile samples (minimum 150 mm x 200 mm) of the kind and color proposed for use along with the name of the selected supplier, to Project Personnel for approval prior to start of work.

Shop drawings are required for products specified showing fabrication details; composite structural system; plans of tile placement including joints, and material to be used as well as outlining installation materials and procedure.

Material Test Reports: Submit test reports from qualified independent testing laboratory indicating that materials proposed for use are in compliance with requirements and meet the properties indicated. All test reports shall be conducted on a cast-in-place tactile tile system as certified by a qualified independent testing laboratory.

Installation:

The concrete placing and finishing operations require typical mason's tools, however, a 4' long level with electronic slope readout, 11 Kg (25 lb) mass weights, vibrator and small sledge hammer with 50 mm x 150 mm x 500 mm wood tamping plate are specific to the installation of the cast-in-place system.

The physical characteristics of the concrete shall be consistent with the contract specifications while maintaining a slump range of 4 - 7 to permit solid placement of the Cast-In-Place Tile System. An overly wet mix will cause the cast-in-place system to float, therefore under these conditions suitable weights such as 2 concrete blocks or sandbags 11 kg (25 lb) shall be placed on each tile.

The concrete shall be placed and finished, true and smooth to the required dimensions and slope prior to tile placement. Immediately after finishing the concrete, the electronic level should be used to check that the required slope is achieved. The tile shall be placed true and square to the curb edge in accordance with the contract drawings. The tiles shall be tamped or vibrated into the fresh concrete to ensure that the field level of tile is flush to the adjacent concrete surface. The contract drawings indicate that the tile field level (base of truncated dome) is flush to adjacent

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surfaces to permit proper water drainage and eliminate tripping hazards between adjacent finishes. The tolerance for elevation differences between tile and adjacent surface is 2 mm.

Immediately after tile placement, the tile elevation is to be checked to adjacent concrete. The tile elevation and slope should be set consistent with contract drawings to permit water drainage to curb as the design dictates.

While concrete is workable, a steel trowel shall be used to trowel the concrete around the tile perimeter to the field level of the tile.

During and after the tile installation and the concrete curing stage, it is imperative that there is no walking, leaning or external forces placed on the tile to rock the tile, causing a void between the underside of tile and concrete.

Following tile placement, review installation tolerances to contract drawings and adjust tile before the concrete sets, 2 suitable weights of 11 Kg (25 lb) each shall be placed on each tile as necessary to ensure solid contact of tile underside of concrete.

Cleaning, Protecting, and Maintaining:

Cleaning: Following the curing of the concrete, the protective plastic wrap is to be removed from the tile face by cutting the plastic with a sharp knife tight to the concrete/tile interface. If concrete bleeding occurs, a wire brush will clean the residue without damage to the tile surface.

Protecting: Protect tiles against damage from rolling loads following installation by covering with plywood or hardwood.

Maintenance Instructions: Submit copies of manufacturer's specified maintenance practices for each type of tactile tile and accessory as required. This information shall be shared with local highway maintenance personnel.

Method of Measurement:

Detectable warnings on new curb ramps, including concrete, cast-in-place tiles, and all other work and materials necessary for fabrication, transport, and installation will be measured by the square meter.

Basis of Payment:

Such payment shall be full compensation for all labor, materials, and equipment required to install the truncated domes including surface preparation and removal/replacement of concrete or asphalt.

Pay Item		<u>Pay Unit</u>
608.26	Curb Ramp Detectable Warning Field	Square Meter

SPECIAL PROVISION <u>SECTION 609</u> CURBING

(Concrete Base for Curbing)

<u>Description</u> This work shall consist of furnishing and placing a portland cement concrete base beneath and around both new and reset Vertical Curb Type 1, including terminal ends and curb inlets, as shown on the Special Detail.

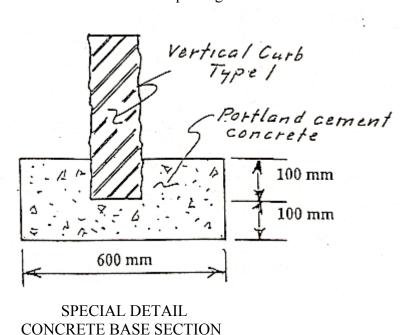
MATERIALS

<u>Portland Cement Concrete</u> Portland cement concrete shall consist of a 5½ bags per cubic yard mix with fine and coarse aggregate and water proportioned as approved by the Resident.

CONSTRUCTION REQUIREMENTS

<u>General</u> The Vertical Curb Type 1 shall be set and held firmly in place on a prepared foundation to the proper line and grade using shim block to conform to the Special Detail shown below.

Portland cement concrete shall be placed beneath and around the curbing, including curb inlets and terminal sections. Forms will not be required if suitable trenches can be provided to allow placing the concrete to the approximate dimensions shown. Backfilling shall not be performed until 24 hours after placing the concrete.



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Method of Measurement Concrete base for curbing will be measured by the linear meter of portland cement concrete placed as shown on the Special Detail.

<u>Basis of Payment</u> The accepted quantity of concrete base for curbing will be paid for at the Contract unit price per linear meter, complete in place. Payment shall be full compensation for furnishing and placing portland cement concrete, excavating and backfilling as necessary, and forms as needed.

Payment will be made under:

Pay Item Pay Unit

609.50 Concrete Base for Curbing

Meter [Foot]

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SPECIAL PROVISIONS SECTION 621 LANDSCAPE

(Plant Species specification and Quantities List)

The following list of items provides the estimated quantities for use on this project. The scientific name of the plant material is provided along with the common name in parenthesis.

The contractor shall follow MaineDOT Standard Specifications for landscape materials and installation procedures (sec. 621).

The MaineDOT Landscape Architect or his designee will be available to inspect plant materials and stake the location of plant materials at the time of planting. Spirea albiflora (Japanese White Spirea) shall be planted in mulched beds, 600 mm on center.

ITEM#	Description	Unit	Quantity	Total
621.032	Evergreen Trees (1500 mm – 1800 mm) B&B	Ea.		9
	Picea Glauca (White Spruce)		9	
621.12	Sm Deciduous Trees (1500 mm – 1800 mm)	Ea.		5
	B&B			
	Malus "Spring Snow" (Spring Snow Crabapple		5	
621.249	Lg Deciduous Trees (1800 mm – 2400 mm)	Ea.		13
	B&B			
	Acer Rubrum (Red Maple)		6	
	Acer Sacharrum (Sugar Maple)		7	
621.54	Deciduous (450 mm – 600 mm) con	Ea.		24
	Cornus Racemoa (Gray Dogwood)		14	
	Spirea Albiflora (Japanese White Spriea)		10	
621.8	Establishment Period	LS	1	1

SPECIAL PROVISION <u>SECTION 635</u>

PREFABRICATED BIN TYPE RETAINING WALL

(Prefabricated Concrete Modular Gravity Wall)

The following replaces Section 635 in the Standard Specifications:

<u>Description</u> This work shall consist of the construction of a prefabricated modular reinforced concrete gravity wall in accordance with these specifications and in reasonably close conformance with the lines and grades shown on the plans, or established by the Resident.

Included in the scope of the Prefabricated Concrete Modular Gravity Wall construction are: all grading necessary for wall construction, excavation, compaction of the wall foundation, backfill, construction of leveling pads, and segmental unit erection.

The Prefabricated Concrete Modular Gravity Wall design shall follow the general dimensions of the wall envelope shown in the contract plans. The top of the leveling pad shall be located at or below the theoretical leveling pad elevation. The minimum wall embedment shall be at or below the elevation shown on the plans. The top of the face panels shall be at or above the top of the panel elevation shown on the plans.

The Contractor shall require the design-supplier to supply an on-site, qualified experienced technical representative to advise the Contractor concerning proper installation procedures. The technical representative shall be on-site during initial stages of installation and thereafter shall remain available for consultation as necessary for the Contractor or as required by the Resident. The work done by this representative is incidental.

<u>Materials</u> Materials shall meet the requirements of the following subsections of Division 700 - Materials:

Gravel Borrow	703.20
Preformed Expansion Joint Material	705.01
Reinforcing Steel	709.01
Structural Pre-cast Concrete Units	712.061
Drainage Geotextile	722.02

The Contractor is cautioned that all of the materials listed are not required for every Prefabricated Concrete Modular Gravity Wall. The Contractor shall furnish the Resident a Certificate of Compliance certifying that the applicable materials comply with this section of the specifications. Materials shall meet the following additional requirements:

Concrete Units

<u>Tolerances</u> In addition to meeting the requirements of 712.061, all prefabricated units shall be manufactured with the following tolerances. All units not meeting the listed tolerances will be rejected.

- 1. All dimensions shall be within (edge to edge of concrete) 5 mm [$\pm \frac{3}{16}$ in].
- 2. <u>Squareness</u> The length differences between the two diagonals shall not exceed 8 mm $[^5/_{16}$ in].
- 3. <u>Surface Tolerances</u> For steel formed surfaces, and other formed surface, any surface defects in excess of 2 mm [.08 in] in 1.2 m [4 ft] will be rejected. For textured surfaces, any surface defects in excess of 8 mm [⁵/₁₆ in] in 1.5 m [5 ft] shall be rejected.

Joint Filler (where applicable) Joints shall be filled with material approved by the Resident and supplied by the approved Prefabricated Concrete Modular Gravity Wall supplier. A 100 mm [4 in] wide, by 13 mm [½ in] preformed expansion joint filler shall be placed in all horizontal joints between facing units. In all vertical joints, a space of 6 mm [¼ in] shall be provided. All Preformed Expansion Joint Material shall meet the requirements of Section 502.03.

Woven Drainage Geotextile Woven drainage geotextile 300 mm [12 in] wide shall be bonded with an approved adhesive compound to the back face, covering all joints between units, including joints abutting concrete structures. Geotextile seam laps shall be 150 mm [6 in] minimum. The fabric shall be secured to the concrete with an adhesive satisfactory to the Resident. Dimensions may be modified per the wall supplier's recommendations, with written approval of the Resident.

<u>Concrete Shear Keys (where applicable)</u> Shear keys shall have a thickness at least equal to the pre-cast concrete stem.

Concrete Leveling Pad Cast-in-place concrete shall be Class A concrete conforming to the requirements of Section 502 Structural Concrete. The horizontal tolerance on the surface of the pad shall be 6 mm [¼ in] in 3 m [10 ft]. Dimensions may be modified per the wall supplier's recommendations, with written approval of the Resident.

Backfill and Bedding Material Bedding and backfill material placed behind and within the reinforced concrete modules shall be gravel borrow conforming to the requirements of Section 703.20. The backfill materials shall conform to the following additional requirements: the plasticity index (P.I.) as determined by AASHTO T90 shall not exceed 6. Compliance with the gradation and plasticity requirements shall be the responsibility of the Contractor, who shall furnish a copy of the backfill test results prior to construction.

The backfilling of the interior of the wall units and behind the wall shall progress simultaneously. The material shall be placed in layers not over 200 mm [8 in] in depth, loose measure, and thoroughly compacted by mechanical or vibratory compactors. Puddling for compaction will not be allowed.

Materials Certificate Letter The Contractor, or the supplier as his agent, shall furnish the Resident a Materials Certificate Letter for the above materials, including the backfill material, in accordance with Section 700 of the Standard Specifications. A copy of all test results performed by the Contractor or his supplier necessary to assure contract compliance shall also be furnished to the Resident. Acceptance will be based upon the materials Certificate Letter, accompanying test reports, and visual inspection by the Resident.

<u>Design Requirements</u> The Prefabricated Concrete Modular Gravity Wall shall be designed by a Professional Engineer. The design to be performed by the wall system supplier shall be in accordance with AASHTO Standard Specifications for Highway Bridges, current edition, except as required herein. Thirty days prior to beginning construction of the wall, the design computations shall be submitted to the Resident for review by the Department. The design by the wall system supplier shall consider the stability of the wall as outlined below:

(a) <u>Safety Factors</u> The minimum factors of safety shall be as follows:

1. Overturning: 2.0

(No reduction of the overturning safety factor will be allowed for walls founded on rock.)

2. Sliding:

1.5

3. Stability of temporary construction slope:
4. Ultimate bearing capacity:
5. Pullout Resistance
1.2
2.0
1.5

(b) <u>Backfill and Wall Unit Soil Parameters</u> For overturning and sliding stability calculations, earth pressure shall be assumed acting on a vertical plane rising from the back of the lowest wall stem. For overturning, the unit weight of the backfill within the wall units shall be limited to 1602 kg/m³ [100 pcf]. For sliding analyses, the unit weight of the backfill within the wall units can be assumed to be 1922 kg/m³ [120 pcf]. Both analyses may assume a friction angle of 34 degrees for backfill within the wall units.

These unit weights and friction angles are based on a wall unit backfill meeting the requirements for select backfill in this specification. Backfill behind the wall units shall be assumed to have a unit weight of 1922 kg/m³ [120 pcf] and a friction angle of 30 degrees. The friction angle of the foundation soils shall be assumed to be 30 degrees unless otherwise noted on the plans.

- (c) Internal Stability Internal stability of the wall shall be demonstrated using accepted methods, such as Elias' Method, 1991. Shear keys shall not contribute to pullout resistance. Soil-to-soil frictional component along stem shall not contribute to pullout resistance. The failure plane used to determine pullout resistance shall be found by the Rankine theory only for vertical walls with level backfills. When walls are battered or with backslopes > 0 degrees are considered, the angle of the failure plane shall be per Jumikus Method. For computation of pullout force, the width of the backface of each unit shall be no greater than 1.37 m [4.5 ft]. A unit weight of the soil inside the units shall be assumed no greater than 1922 kg/m³ [120 pcf] when computing pullout. Coulomb theory may be used.
- (d) External loads which affect the internal stability such as those applied through piling, bridge footings, traffic, slope surcharge, hydrostatic and seismic loads shall be accounted for in the design.
- (e) The actual applied bearing pressures under the Prefabricated Concrete Modular Gravity block wall shall be clearly indicated on the design drawings.
- (f) <u>Stability During Construction</u> The factors of safety to be used for stability during construction stages shall be the same factors used for the design of the wall.
- (g) <u>Hydrostatic forces</u> Unless specified otherwise, when a design high water surface is shown on the plans at the face of the wall, the design stresses calculated from that elevation to the bottom of wall must include a 0.9 meter [3 ft] minimum differential head of saturated backfill. In addition, the buoyant weight of saturated soil shall be used in the calculation of pullout resistance.
- (h) <u>Design Life</u> Design life shall be in accordance with AASHTO requirements.
- (i) Not more than two vertically consecutive units shall have the same stem length, or the same unit depth. Walls with units with extended height curbs shall be designed for the added earth pressure. A separate computation for pullout of each unit with extended height curbs, or extended height coping, shall be prepared and submitted in the design package described above.

<u>Submittals</u> The Contractor shall supply wall design computations, wall details, dimensions, quantities, and cross sections necessary to construct the wall. Thirty (30)

days prior to beginning construction of the wall, the design computations and wall details shall be submitted to the Resident for review. The fully detailed plans shall be prepared in conformance with Section 105.7 of the Standard Specifications and shall include, but not be limited to the following items:

- I. A plan and elevation sheet or sheets for each wall, containing the following: elevations at the top of leveling pads, the distance along the face of the wall to all steps in the leveling pads, the designation as to the type of prefabricated module, the distance along the face of the wall to where changes in length of the units occur, the location of the original and final ground line.
- II. All details, including reinforcing bar bending details, shall be provided. Bar bending details shall be in accordance with Department standards.
- III. All details for foundations and leveling pads, including details for steps in the leveling pads, as well as allowable and actual maximum bearing pressures shall be provided.
- IV. All prefabricated modules shall be detailed. The details shall show all dimensions necessary to construct the element, and all reinforcing steel in the element.
- V. The wall plans shall be prepared and stamped by a Professional Engineer. Four sets of design drawings and detail design computations shall be submitted to the Resident.
- VI. Four weeks prior to the beginning of construction, the contractor shall supply the Resident with two copies of the design-supplier's Installation Manual. In addition, the Contractor shall have two copies of the Installation Manual on the project site.

CONSTRUCTION REQUIREMENTS

<u>Excavation</u> The excavation and use as fill disposal of all excavated material shall meet the requirements of Section 203 - Excavation and Embankment, except as modified herein.

<u>Foundation</u> The area upon which the modular gravity wall structure is to rest, and within the limits shown on the submitted plans, shall be graded for a width equal to, or exceeding, the length of the module. Prior to wall and leveling pad construction, this foundation material shall be compacted to at least 95 percent of maximum laboratory dry density. Frozen soils and soils unsuitable or incapable of sustaining the required compaction, shall be removed and replaced.

A concrete leveling pad shall be constructed as indicated on the plans. The leveling pad shall be cast to the design elevations as shown on the plans, or as required by the wall supplier upon written approval of the Resident. Allowable elevation tolerances are +3 mm [+0.01 ft] and -6 mm [-0.02 ft] from the design elevations. Leveling pads which do not meet this requirements shall be repaired or replaced as directed by the Resident at no additional cost to the Department. Placement of wall units may begin after 24 hours curing time of the concrete leveling pad.

Method and Equipment Prior to erection of the Prefabricated Concrete Modular Gravity Wall, the Contractor shall furnish the Resident with detailed information concerning the proposed construction method and equipment to be used. The erection procedure shall be in accordance with the manufacturer's instructions. Any pre-cast units that are damaged due to handling will be replaced at the Contractor's expense.

<u>Installation of Wall Units</u> A field representative from the wall system being used shall be available, as needed, during the erection of the wall. The services of the representative shall be at no additional cost to the Department. Vertical and horizontal joint fillers shall be installed as shown on the plans.

The maximum offset in any unit joint shall be 20 mm [3/4 in]. The overall vertical tolerance of the wall, plumb from top to bottom, shall not exceed 12 mm per 3 m [1/2 in per 10 ft] of wall height. The prefabricated wall units shall be installed to a tolerance of plus or minus 20 mm in 3 m [3/4 inch in 10 ft] in vertical alignment and horizontal alignment.

Select Backfill Placement Backfill placement shall closely follow the erection of each row of prefabricated wall units. The Contractor shall decrease the lift thickness if necessary to obtain the specified density. The maximum lift thickness shall be 200 mm [8 in] (loose). Gravel borrow backfill shall be compacted in accordance with Section 203.12 except that the minimum required compaction shall be 95 percent of maximum density as determined by AASHTO T99 Method C or D. Backfill compaction shall be accomplished without disturbance or displacement of the wall units. Sheepsfoot rollers will not be allowed. Whenever a compaction test fails, no additional backfill shall be placed over the area until the lift is recompacted and a passing test achieved.

The moisture content of the backfill material prior to and during compaction shall be uniform throughout each layer. Backfill material shall have a placement moisture content less than or equal to the optimum moisture content. Backfill material with a placement moisture content in excess of the optimum moisture content shall be removed and reworked until the moisture content is uniform and acceptable throughout the entire lift. The optimum moisture content shall be determined in accordance with AASHTO T99, Method C or D. At the end of the day's operations, the Contractor shall shape the last level of backfill so as to direct runoff of rain water away from the wall face.

Method of Measurement Prefabricated Concrete Modular Gravity Wall will be measured by the square meter of front surface not to exceed the dimensions shown on the contract plans or authorized by the Resident. Vertical and horizontal dimensions will be from the edges of the facing units. No field measurements for computations will be made unless the Resident specifies, in writing, a change in the limits indicated on the plans.

Basis of Payment The accepted quantity of Prefabricated Concrete Modular Gravity Retaining Wall will be paid for at the contract unit price per square meter complete in place. Payment shall be full compensation for furnishing all labor, equipment and materials including pre-cast concrete units hardware, joint fillers, woven drainage geotextile, cast-in-place coping or traffic barrier and technical field representative. Cost of cast-in-place concrete for leveling pad will not be paid for separately, but will be considered incidental to the Prefabricated Concrete Modular Gravity Wall.

Excavation, foundation material and backfill material will all be incidental to the Prefabricated Concrete Modular Gravity Wall.

There will be no allowance for excavating and backfilling for the Prefabricated Concrete Modular Gravity Wall beyond the limits shown on the approved submitted plans, except for excavation required to remove unsuitable subsoil in preparation for the foundation, as approved by the Resident. Payment for excavating unsuitable subsoil shall be full compensation for all costs of pumping, drainage, sheeting, bracing and incidentals for proper execution of the work.

Payment will be made under:

Pay Item
635.14 Prefabricated Concrete Modular Gravity Wall

Pay Unit
Square Meter [Square Foot]

SPECIAL PROVISION SECTION 638 BRIDGE LIGHTING (Embedded Work in Structures)

<u>Description:</u> This work shall consist of furnishing and installing conduit, junction boxes and incidentals for bridge lighting in structures as shown on the plans and described herein.

This work shall also include furnishing and installation of the anchor bolts for light standards. Light standards will be paid for separately.

Materials and Methods

(a) Installation of Raceway System

The Contractor shall install conduits to complete the raceway system as shown on the plans.

The conduit shall be Schedule 40 PVC meeting the requirements specified in Subsection 715.03 and shall be approved for the intended use by the National Electrical Code and labeled with the Underwriters Laboratories listing unless otherwise shown on the plans.

Conduits embedded in concrete shall be secured in such a way as to ensure that there is no movement during the placing of concrete. Immediately after concrete has been placed, the Contractor shall inspect the complete raceway system to ensure that all conduits are clean and free of all obstructions.

Explosion proof flexible conduits shall be installed as shown on the plans.

At the construction joints, expansion couplings shall be used to join galvanized steel conduits. The conduits shall be pushed into the stop provided, marked and withdrawn to allow not less than 9.5 mm movement on each side of the coupling.

When directed by the Engineer, a mandrel not less than 305 mm long and having a diameter of 6.35 mm less than the diameter of the conduit shall

be pulled through each run to remove all sand and other foreign matter. A pull wire (or other approved substitute) shall be installed by the Contractor, unless otherwise indicated. The ends of all conduits shall be plugged after cleaning.

At the completion of the installation of the raceway system, the covers shall be secured to the junction boxes, complete with gaskets.

Immediately after concrete has been placed, the Contractor shall inspect the complete raceway system to ensure that all conduits are clean and free of all obstructions. This conduit shall also be used for the bridge instrumentation. For further information see Special Provision Section 590.

(b) Anchor Bolts

Anchor bolts, nuts and circular steel washers shall be carbon steel conforming to the requirements of ASTM A325M and hot-dipped galvanized in accordance with ASTM A153M. Washers shall be hot-dipped galvanized.

Anchor bolts shall be spaced and supported by means of a suitable template. The template shall be supplied by the Contractor to fit the bolt circle, and positioned in such a manner that is true and level.

Immediately after the template is removed, and the projecting threads of the pole anchor bolts shall be grated and protected with a conduit sleeve, held in position with the nuts and washers required for holding down the lighting poles. This thread protection shall remain in place until the pole is erected.

(c) Junction Boxes Embedded in Structures

Junction boxes shall be located and secured such that when complete, the covers shall be flush with the finished concrete surfaces unless otherwise specified. All openings in the boxes not used in this installation shall be plugged.

The cast iron box shall be outside flanged, recessed cover type, suitable for flush mounting and listed by the Underwriters Laboratories, Inc., as rain tight and watertight of zinc, neoprene gasket or an approved equivalent, and stainless steel cover screws. The inside dimensions and wall thickness shall meet the specifications of the National Electrical Code, latest edition.

The cast iron junction box shall be installed as shown on the plans.

Non-metallic – PVC (polyvinyl chloride) junction boxes may be used in place of cast iron when approved by the Engineer. Non-metallic junction boxes shall be Underwriters Laboratories, Inc. approved.

Method of Measurement

The quantity to be measured for payment for Embedded Work in Structures will be the lump sum unit.

Basis of Payment

The accepted quantity of Embedded Work in Structures will be paid for at the contract lump sum price for the complete installation of conduits, junction boxes, and anchor bolts in structures and will be full compensation for all labor, materials, equipment, and incidentals necessary to acceptably complete the work.

Light standards will be paid for under Section 634.

Pay Item		Pay Unit
638.01	Embedded Work in Structures	Lump Sum

SPECIAL PROVISION <u>SECTION 652</u> MAINTENANCE OF TRAFFIC

Section 652 - Maintenance of Traffic, of the Standard Specifications is ammended as follows:

652.3.6 Traffic Control The Contractor shall provide a minimum paved roadway width of 6.7 m [22 ft] on the approaches for two-way traffic at all times with the exception that when work is being done on the approaches such that Route 201 must be reduced to one paved lane 3.4 m [11 ft] shall be provided for two-way one-lane alternating traffic controlled by flaggers. Route 201 shall not be reduced to one lane for any more than 21 days for the entire contract period. For the purpose of computing the number of days the route is reduced to one lane any date the contractor closes a lane for four hours or less, ½ day of the twenty-one days has elapsed, any date the contractor closes route for more than four hours the entire day shall be counted against the twenty-one day limit. The existing travelway width shall be maintained to the maximum extent practical. Vertical panel markers, drums, cones, or striping shall be used to clearly delineate the roadway through the construction area. Two-way traffic operation shall be provided at all times that the Contractor is not working on the project. Two-way traffic alternating in one lane shall be controlled through work areas by flaggers, utilizing radios, field telephones, or other means of direct communication.

The traffic control devices shall be moved or removed as the work progresses to assure compatibility between the uses of the traffic control devices and the traffic flow. Traffic control devices that become unnecessary shall be immediately removed from use.

In order to maintain two way traffic on the approaches it is anticipated that the contractor will need to shore the excavation with some type of temporary shoring. This shoring shall be designed in accordance with the standard specification section 510 special detours. The work of designing, constructing, and removing the temporary shoring including all labor, equipment and materials necessary for the successful completion of the work shall not be paid for directly, but shall be considered incidental to item number 652.361, maintenance of traffic control devices.

Pavement markings shall be altered as required to conform to the existing traffic flow pattern. Repainting of pavement marking line, if required to maintain the effectiveness of the line, shall be considered maintenance of traffic control devices. No separate payment will be made. Inappropriate existing pavement markings shall be removed whenever traffic is rerouted, and temporary construction pavement markings shall be placed. Obliteration and removal of non-applicable markings and placement of temporary construction pavement markings shall be considered maintenance of traffic control devices and will be paid for under the appropriate Contract item. Traffic changes shall not be made unless there is sufficient time, equipment, materials, and personnel available to complete the change properly before the end of the workday. This provision will not be required when traffic is rerouted for brief periods during daylight hours and the route can be clearly defined by channelizing devices, or flaggers, or both.

Town: Jackman **PIN:** 10106.00 **Date:** May 19, 2004

SPECIAL PROVISION SECTION 656

Temporary Soil Erosion and Water Pollution Control

The following is added to Section 656 regarding Project Specific Information and Requirements. All references to the Maine Department of Transportation Best Management Practices for Erosion and Sediment Control (a.k.a. Best Management Practices manual or BMP Manual) are a reference to the latest revision of said manual. The "Table of Contents" of the latest version is dated "1/19/00" (available at http://www.state.me.us/mdot/mainhtml/bmp/bmpjan2000.pdf.)

Procedures specified shall be according to the BMP Manual unless stated otherwise.

Project Specific Information and Requirements

The following information and requirements apply specifically to this Project. The temporary soil erosion and water pollution control measures associated with this work shall be addressed in the SEWPCP.

- 1. This project is located over Moose River in the upper portion of the Kennebec River watershed. This project is the dividing line between a Class A portion of the river and a Class B portion. This project Shall be considered **SENSITIVE** in accordance with the BMP Manual, due to the proximity of this project to the resource. The Contractor's SEWPCP shall comply with Section II.B., <u>Guidelines for Sensitive Waterbodies</u> in the BMP Manual.
- 2. A preconstruction field review is mandatory for this project. The preconstruction field review shall take place before commencing any work that involves soil disturbance or potential impacts on water quality. The date and time shall be set by the Contractor in consultation with the Construction Manager and the ENV Water Resources Unit representative.
- 3. Newly disturbed earth shall be mulched by the end of each workday. Mulch shall be maintained on a daily basis.
- 4. Dust control items other than those under *Standard Specification, Section 637* <u>Dust Control</u>, if applicable, shall be included in the plan.
- 5. Demolition debris (including debris from wearing surface removal, saw cut slurry, dust, etc.) shall be contained and shall not be allowed to discharge to any resource. All demolition debris shall be disposed of in accordance with *Standard Specifications*, *Section* 202.03 Removing Existing Superstructure, Structural Concrete, Railings, Curbs, Sidewalks and Bridges. Containment and disposal of demolition debris shall be addressed in the Contractor's SEWPCP.
- 6. The SEWPCP shall describe the location and method of temporary erosion and sediment control for existing and proposed catch basins, outlet areas and culvert inlets and outlets.
- 7. Culvert inlet and outlet protection shall be installed on the same day that pipe placement occurs.
- 8. Permanent slope stabilization measures shall be applied within one week of the last soil disturbance.

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SPECIAL PROVISION SECTION 656

Temporary Soil Erosion and Water Pollution Control

- 9. Permanent seeding shall be done in accordance with *Standard Specification, Section 618 Seeding* unless the Contract states otherwise.
- 10. After November 1 the Contractor shall use winter stabilization methods, such as Erosion Control Mix as specified in *Standard Specification*, *Section 619 Mulch*. If required, spring procedures for permanent stabilization shall also be described in the plan. Use of this product for over-winter temporary erosion control will be incidental to the contract and be paid for as part of Pay Item 656.75.
- 11. All disturbed ditches shall be stabilized by the end of each workday. Stabilization shall be maintained on a daily basis. Erosion control blanket shall be installed in the bottoms of all ditches except where a stone lining is planned. Seed shall be applied prior to the placement of the blanket.
- 12. Stream flow shall be maintained at all times. The SEWPCP shall describe the containment method for removal of the existing abutments, including installation of cofferdams and dewatering procedures.
- 13. A cofferdam sedimentation basin is required if cofferdams are used. The basin shall be located in an upland area where the water can settle and seep into the ground or be released slowly to the resource in a manner that will not cause erosion. The type and location of such a cofferdam sedimentation basin shall be addressed in the SEWPCP.
- 14. Concrete truck wash water will not be allowed to enter the Moose River. Cleanout of concrete trucks must take place within an internally drained area.

NOTES:

1. Any and all references to "bark mulch" or "composted bark mix" shall be a reference to "Erosion Control Mix" in accordance with *Standard Specification, Section 619 - Mulch*.

SPECIAL PROVISION

WATER UTILITY GENERAL REQUIREMENTS

1 – DESCRIPTION

This section includes the General Requirements for completing the water utility installation portion of this contract. It includes general specifications for those items that are common to the water utility work.

The term Engineer used in the Water Utility related specifications refers to Dirigo Engineering, Waterville, ME (207) 873-5260.

2 - SUBMITTALS

A.) General - Submit to the Engineer six (6) copies of shop drawings, project data and samples for all products, materials and equipment proposed for the completed project. A 14-day review period will be required for all submittals. Review of submittals is for general compliance with the contract documents. No responsibility is assumed by the Utility District or Engineer for the correctness of dimensions or details

Review of submittals by the Engineer shall not relieve the Contractor from responsibility for any variation from the requirements of the contract documents unless the Contractor has in writing called the Engineer's attention to each such variation at the time of submission and the Engineer has given written approval of each such variation by a specific written notation thereof. The Engineer's review of submittals shall not relieve the Contractor from responsibility for errors or omissions in the shop drawings.

B.) <u>Shop Drawings, Project Data and Samples</u> - All submittals shall bear a note and signature indicating that they were reviewed by the Contractor and found to be in conformance with the contract documents.

Any material or equipment submitted for review, which is arranged differently or is a different physical size from that shown or specified shall be accompanied by shop drawings indicating the different arrangements of size and the method of making the various connections to the equipment. The final result will be compatible with the system or structure as designed.

C.) <u>Schedules</u> - Submit a time schedule, showing complete sequence of construction by activity, prior to commencement of work. Update the schedule monthly showing changes occurring since previous submission.

Distribute copies of reviewed schedules to subcontractors and other concerned parties. Instruct recipients to report any inability to comply and provide detailed explanation with suggested remedies.

3 - QUALITY CONTROL

A.) <u>Construction Materials</u> - It is the Contractor's sole responsibility to provide and use only new materials, new products and new equipment that meet the requirements of the plans and specifications and will result in a completed project that is durable and of high quality in all respects. The Engineer may request samples of any material that the Contractor proposes to use. Such samples shall be of sufficient size and quantity to allow appropriate testing of the sample.

The Contractor shall provide equipment and parts from a single manufacturer to the greatest extent possible. This is to facilitate ease of service, maintenance and parts replacement. Engineer reserves the right to reject proposed equipment from various manufacturers if suitable materials are available from fewer manufacturers, and to require that source of materials be unified to the maximum extent possible.

- B.) <u>Construction Review</u> The Utility District or Engineer or his representative will provide whatever Construction Review that he feels is necessary. Such Construction Review in no way reduces the Contractor's responsibility for supervision or quality control. The Contractor shall cooperate fully in the Utility District's or Engineer's Construction Review efforts. The Contractor shall keep the Engineer informed of work in progress as well as the schedule of work to be done. The Contractor shall allow complete access to the project by the Utility District, Engineer, and any representatives of any regulatory or funding agencies. The Engineer will not be responsible for the construction means, controls, techniques, sequences, procedures, or construction safety.
- C.) <u>Testing</u> The Contractor shall perform all testing specified in the contract documents unless the test is specifically noted to be done by the Utility District or Engineer. The Contractor shall notify the Engineer at least 48 hours in advance of any proposed testing or disinfection, and obtain approval for the proposed testing time. Testing and disinfection times must be coordinated with the Engineer so that samples can be delivered to labs and tested properly. In general, Fridays and weekends are not acceptable times for testing and sampling.

The Engineer shall collect all bacteriological samples and deliver them to the lab.

4 - MATERIAL DELIVERY, STORAGE AND HANDLING

In addition to the requirements of the Standard Specifications for material delivery, storage and handling, the following shall apply. Materials shall be new and delivered and stored according to manufacturers' recommendations. Original labels shall be maintained so that they are legible at least until they are installed. Materials shall be transported and stored in such a manner that they do not cause or receive damage.

5 - REPAIRS TO EXISTING FACILITIES

- A.) <u>General</u> The Contractor will be responsible for interruption of service, or other damage to existing water and sewer utilities as stated in the Standard Specifications.
- B.) <u>Maintenance of Service to Customers</u> The Contractor shall be responsible for maintaining water service to customers at all times. The Contractor shall utilize construction and excavation procedures that minimize disruption of service to utility customers. Obtain approval of Engineer regarding proposed methods and schedule for installing connections.

Temporary water service methods, materials and connections must be approved by the local water utility. In general, temporary water services shall consist of a temporary polyethylene main and service installed above ground between fire hydrants or temporary taps. The temporary main shall be of adequate size to service the customers. All street and driveway crossings shall be protected from traffic

All temporary piping shall be disinfected and bacteriologically tested by the Contractor and approved by the local water utility prior to being put into service.

All temporary piping and taps shall be removed once the temporary services are no longer needed. Fittings shall be properly capped and holes properly plugged.

C.) <u>Installation</u> - The methods and equipment to complete repairs must be approved by the Utility District and Engineer. In general, the following methods of connecting and repairing pipes shall apply:

Gravity Sewer Mains:

Straight and transition couplings for mains shall be non-shear sewer couplings Style CNSS as manufactured by Cascade Waterworks Mfg. Co., Style LSS2 or LSS3 as manufactured by Romac Industries, Inc., or approved equal.

Gravity Sewer Services:

Flexible rubber compression couplings (Fernco, Calder, etc.); cast couplings; fittings made specifically for the pipe materials used.

Water Mains and Sewer Force Mains:

Cast couplings, MJ solid sleeves; fittings made specifically for the pipe materials used.

Water Services:

Brass compression couplings; cast couplings; fittings made specifically for the pipe materials used. Connections to PE tubing shall utilize SS inserts and brass compression couplings.

6 - DISCONTINUED FACILITIES

- A.) Mains Discontinued water mains may be left in place. All discontinued mains that have been cut shall have an MJ cap or plug installed on them to prevent migration of water and soil through abandoned lines. Grouting of abandoned lines is not an acceptable alternative to caps or plugs. Discontinued mains abandoned in-place under roadways shall either be removed or shall be filled with flowable fill.
- B.) Flowable Fill Flowable fill (controlled low strength material) shall be a cementitious mixture with low strength, flowable characteristics. The late age strength of the flowable fill shall be in the range of 50 to 150 psi. The flowable fill shall have early setting and strength additives to allow for traffic and construction loads. The flowable fill shall be delivered in ready mixed concrete trucks and placed by chute in a flowable condition into the abandoned pipe or structure.

7 - AS-BUILT RECORDS

- A.) <u>General</u> Maintain accurate as-built records throughout the construction project. A complete bound copy of these as-built records shall be delivered to the Engineer before final payment is made.
- B.) <u>As-Built Drawings</u> The Contractor shall maintain a set of the construction drawings on the site at all times for the purpose of recording the actual configuration of the final work. The drawings shall show in a neat and legible fashion the final configuration of the constructed project, existing utilities, ledge, etc. A complete list of suppliers for each material item used on the project shall also be kept. This information shall be submitted to the Utility District at the conclusion of the work.
- C.) <u>Utility Locations</u> The Contractor shall maintain a neat and accurate bound utility location book on the site at all times for the purpose of recording the location and arrangement of all valves, tees, bends, fittings, service corporations, curb stops, couplings, repairs, etc. The type of pipe and depth shall be noted.

8 - BASIS OF PAYMENT

The work specified in this section is incidental to the overall water utility portion of the project. No payment will be made under this section.

SPECIAL PROVISION Section 822

DUCTILE IRON PIPE AND APPURTENANCES

822.01 GENERAL

Furnish all labor, materials and equipment necessary to install and test all ductile iron mains and fittings, as specified in the contract documents.

822.02 MATERIALS

- A.) Pipe Pipe shall be ductile iron, double cement lined, tar coated, 18-20 foot lengths. Pipe shall be in full conformance with AWWA C151 and AWWA C111 and AWWA C104. All pipe shall be push on unless indicated otherwise in the contract documents. Push-on pipe shall be bell-tite joint Class 52. All push-on joints shall utilize field-loc restraining gaskets. Mechanical joint pipe shall be mechanical joint Class 52.
- B.) <u>Fittings</u> Mechanical joint compact fittings shall be ductile iron Class 350, tar coated and shall include gaskets and corten bolts. Fittings shall be in accordance with AWWA C-153, AWWA C111 for joints and AWWA C104 for cement lining.
 - All fittings for buried service shall be mechanical joint. Fittings shall be manufactured by Tyler, U.S. Pipe, Griffin, Union or approved equal.
- C.) Mechanical Joint Restraint All mechanical joint fittings and connections shall utilize mechanical joint restraints. The restraining devices shall be of ductile iron construction and shall utilize standard MJ gaskets. Mechanical joint restrainers shall be Megalug (EBAA Iron Sales), One-Lok (Sigma), Uniflange Series 1400, or approved equal. Conventional retainer glands with set screws are not acceptable. Split (2-part) restrainers shall be used for restraint of existing push-on joints, as detailed on the plans.
 - The mechanical joint restrainers shall be installed according to AWWA standards and the manufacturer's latest recommendations.
- D.) <u>Foster Adapter (or approved equal)</u> When shown on the drawings, mechanical joint valves and fittings shall be connected using a bolt-through positive restraining device manufactured of ductile iron conforming to ASTM A 80-55-06. Device shall be Foster Adapter (Infact Corporation), or approved equal, and shall be furnished with required accessories.
- E.) <u>Solid Sleeves</u> Solid sleeves shall be ductile iron Class 350 mechanical joint fittings per Section C above. Solid sleeves shall be "long" type (12" minimum length). Mechanical joint restrainers shall be utilized per Section D above.

822.03 INSTALLATION OF BURIED DUCTILE IRON PIPE

Installation shall follow the general AWWA standard for installation of ductile iron water mains - AWWA C600. The only exception is that backfill material for buried pipes shall have no stones larger than 150 mm (6") in diameter. Installation shall also follow the manufacturer's latest recommendations.

All earth and trench ledge excavations shall be extended to at least 150 mm (6") below the bottom of the pipe and then brought to grade with screened base gravel (50 mm max. stone). The screened gravel is considered incidental to the pipe. The pipe shall be placed on this compacted bed and bedded with compacted screened base gravel (50mm max. stone) to 150 mm (6") above the pipe. Backfill to grade shall be per MDOT Standard Specifications Section 206.

Foreign material shall be prevented from entering the pipe at all times (including during storage, installation and while in the trench). No debris, tools, clothing, trench water, or other materials shall be placed in the pipe at any time. Immediately following installation of a pipe in the trench (prior to backfilling and moving of trench box) a secure cap or plug shall be installed in the bell end of the pipe. The cap or plug shall be steel or plastic and shall be gasketed and designed to prevent debris and water from entering the pipe during excavation work.

822.04 TESTING

Ductile Iron Pipe shall be tested per Section 832.

822.05 SEPARATIONS AND CROSSINGS OF WATER MAINS AND SEWERS

Water mains shall be laid at least 3 meters (10 feet) horizontally from any existing or proposed sanitary sewer, force main, storm sewer or sewer manhole, per State of Maine Department of Human Services Regulations. The distance shall be measured edge of pipe to edge of pipe.

Water mains crossing sewers (including force mains or storm drains) shall be laid to provide a minimum vertical distance of 450 mm (18") of free earth between the water main and the sewer. This shall be the case where the water main is either above or below the sewer. At crossings, one full length of water pipe shall be located so both joints will be as far from the sewer as possible. Special structural support for the water and sewer pipes may be required.

822.06 METHOD OF MEASUREMENT

<u>Ductile Iron Pipe</u> - The pipe shall be measured by the installed length to the nearest one-half (1/2) meter continuous through fittings. This shall be the method of measurement for buried ductile iron pipe.

822.07 BASIS OF PAYMENT

A.) Class 52 Ductile Iron Pipe - The accepted and measured quantities of ductile iron pipe will be paid at the contract unit price per meter for the types and sizes specified, complete in place. This includes all labor materials and equipment required to install the mains as described in the contract documents. For buried pipe this includes: excavations to locate existing pipe, excavating and maintaining the trench, shoring, dewatering, bedding material and placement, removal and disposal of existing buried water facilities, filling abandoned facilities with flowable fill or gravel, including fill material, pipe, gaskets, fittings (including tees and bends), bolts, mechanical joint restrainers, couplings, thrust blocks, flushing, backfilling, compaction, surface restoration (where applicable), disinfecting and testing. Payment of the unit price for Class 52 Ductile Iron Pipe shall be full compensation for the incidental work items needed for a complete water main installation including: capping of existing mains, removal of valve and curb boxes, cutting and capping pipes and thrust blocks.

Payment shall be made under:

Pay ItemPay Unit822.34200 mm (8") Class 52 Ductile Iron PipeLinear meter

B.) Restraining Existing 200 mm (8") Push-On Joints - This includes all labor, materials and equipment required to restrain existing 200 mm (8") push-on joints, as described in the contract documents. This includes excavations to locate the joints and uncover the joints, installation of joint restraint, as detailed on the drawings, including split MJ mega-lug restrainers with SS threaded rod and nuts, re-bedding the water main and backfill to grade.

Payment shall be made under:

Pay Item		<u>Pay Unit</u>
827.3211	Restraining Existing 200 mm (8") Push-On Joints	Each

SPECIAL PROVISION Section 823

GATE VALVES WITH BOXES

823.01 GENERAL

Furnish and install all gate valves with boxes and appurtenances as specified in the contract documents.

823.02 MATERIAL

A.) Gate Valves for Buried Service - Gate valves shall be Resilient Seat Type, mechanical joint, Non Rising Stem. The valve design and construction shall comply with AWWA C509. The body and bonnet shall be ductile or cast iron and shall conform in thickness to those listed for gray iron in the applicable AWWA gate valve standards. The valve stem root diameter shall exceed AWWA C500 and the valve shall have a bronze thrust collar bushing. Valves shall have heat fusion bonded epoxy coating inside and out. Acceptable manufacturers and models are:

AFC 500 Metroseal 250 RS Mueller Resilient Wedge Model 2360

Gate valves shall open left.

B.) <u>Tapping Sleeves and Gate Valves</u> - Tapping sleeves shall be of ductile iron construction or stainless steel construction with ductile iron flange. Tapping valves shall be designed for connection to a tapping sleeve on one end and shall be MJ on the other end. Valves shall be as specified above. Prior to ordering the tapping sleeve and valve, the Contractor shall verify by test pit the size of the water main to be tapped.

Tapping sleeve and valve shall be installed while the main remains fully charged, avoiding the need to interrupt service to the water system. The tapping machine shall be properly disinfected prior to being used. The pipe coupon shall be retracted by the tapping machine.

Tapping sleeve and valves shall only be installed by experienced and approved specialty contractors with experience in this type of work.

C.) <u>Insertion Gate Valve</u> - The insertion valve and tapping sleeve shall be Quikvalve Insertion Valve as manufactured by Transmate (a division of Romac Industries Inc. in Seattle, Washington) or approved equal. The sleeve shall be designed to accommodate the equipment and fixtures necessary to drill and ream the pipe and install the insertion valve without any interruption in water service. The insertion valve shall provide a full-unobstructed full-flow waterway after installation. Insertion valves will OPEN LEFT.

i.) Insertion Valve Tapping Sleeve

The tapping sleeve shall be fabricated to assure a 360-degree seal around the pipe under working pressures up to 150 psi (test pressure: 225 psi). The sleeve shall be made of ASTM A-36 steel, and shall be lined and coated with fusion-bonded epoxy (10-12 mils) meeting the requirements of AWWA C-213. Heavy gauge type 304 stainless steel armor plates shall be used to bridge the gap between the sleeve halves.

The tapping sleeve shall utilize a special flange that mates with the installation equipment and insertion valve. Lugs on the sleeve shall be configured to provide a bolting surface and assure a 360-degree seal. The lugs shall be designed to prevent excessive stress on the pipe and minimize distortion of soft (PVC) pipe. Bolts and nuts shall be Type 304 stainless steel.

Gaskets shall be made of Styrene Butadiene Rubber (SBR) compounded for potable water service in accordance with ASTM D2000 3 BA715. The gaskets shall provide a positive 360-degree seal on the pipe and assure a tight, durable and resilient seal at the pipe sleeve – valve insert junction.

ii.) <u>Insertion Valve Assembly</u>

The insert shall consist of a ductile iron casting coated with SBR rubber compounded for water service with a durometer of 55 Shore A. The insert shall seal on the inside diameter of the insertion valve sleeve neck and the lower half of the water main.

The valve stem and nut assembly shall be in accordance with AWWA C-500-80, section 3.12. A special flange, made of ASTM A-36 steel, shall be used to hold the valve assembly together and act to seal against the valve sleeve flange. The valve flange gasket shall be made of SBR rubber, compounded for water service in accordance with ASTM D2000 3 BA715, with a durometer of 70 Shore A. The gasket shall act as the sealing interface between the valve flange and the sleeve flange. Bolts, nuts, and washers shall be Type 304 stainless steel.

D.) Valve Boxes - Valve boxes shall be cast iron, two piece, sliding type with a top flange and a minimum inside shaft diameter of 133 mm (5 ½"). Boxes shall have the word "Water" clearly cast into the cover. Valve box bases shall be belled and valve box tops shall be flanged. The top shall be approved posi-cap type and shall fit tight against the bell of the base section of the valve box. Valve box covers shall be CI construction drop type. Valve boxes of the appropriate length shall be provided for all buried service valves and are considered incidental to the valve bid item.

823.03 INSTALLATION

Installation shall follow the general AWWA standard for installation of pipe and fittings - AWWA C600. The only exception is that backfill material for buried valves shall have no stones larger than 50 mm (2") in diameter. Installation shall also follow the manufacturer's latest recommendations. Care shall be taken to insure that the valve box base is supported by compacted select backfill rather than the valve body. Valve boxes shall be centered over the operating nut and installed plumb. Install a Posi-Cap device on valve prior to installing valve box.

The insertion valve and sleeve shall be installed in accordance with manufacturer's recommendations. The valve shall be installed in the open position, under water pressure without any interruption of water service.

823.04 METHOD OF MEASUREMENT

Gate Valves with boxes shall be measured by the number of units of each size, complete and accepted in place.

823.05 BASIS OF PAYMENT

This item includes all labor, materials and equipment required to furnish and install gate valves with boxes as described in the contract documents. This includes: valves, gaskets, bolts, mechanical joint restrainers, valve boxes, posi-caps, and installation. Removal of the valve box (when delineated on the plans) shall be incidental to the appropriate valve pay item.

Payment shall be made under:

Pay Item		Pay Unit
822.3256	200 mm (8") Tapping Sleeve Valve with Box	each
823.3254	200 mm (8") Insertion Valve with Box	each

SPECIAL PROVISION Section 825

WATER SERVICES

825.01 GENERAL

Furnish and install water services as specified in the contract documents. Each home or business along the route of the water main replacement shall receive a new water service including corporation, service line and curb stop with box. Water services shall be as specified in this Section and shown on the details on the drawings.

825.02 MATERIAL

All service brass shall conform to AWWA C-800. The pack joint end connection shall consist of a Buna-N beveled gasket for watertight fit and an independent, slip-clamp locking device which is grooved on the inside for additional restraint.

- A.) <u>Copper Tubing</u> -- Copper tubing shall be Type K as manufactured by Revere or Bridgeport Brass. Tubing shall conform to ASTM B-88 and AWWA C-800. Tubing shall be of the diameters shown on the drawings. Individual house services shall be 19 mm (3/4 inch) in diameter.
- B.) <u>Corporations</u> -- Corporations shall be ball valve type. Corporations inlets shall have AWWA taper and outlets shall have a compression pack joint. Corporations for individual house services shall be 19 mm (3/4 inch). Corporations shall be manufactured by Ford Meter Box Company, Inc., or approved equal. Corporation taps to PVC mains of all sizes or ductile iron mains 150 mm (6 inch) and smaller shall utilize a service saddle. All corporations larger than 25 mm (1 inch) shall utilize a service saddle.
- C.) <u>Curb Stops</u> -- All curb stops shall be ball valves as manufactured by Ford Meter Box Company, Inc., or approved equal. Curb stops shall have copper packed joints on inlets and outlets. Curb stops shall not have drains. Curb stops for individual house services shall be 19 mm (3/4 inch).
- D.) <u>Curb Boxes</u> -- Curb boxes shall be cast iron extension type with arch pattern base. Curb box lids shall come complete with pentagon brass plug and shall be marked "Water." A 12.7 mm (1/2 inch) stainless steel service box rod shall be included.
- E.) <u>Service Saddles</u> -- Service saddles shall have ductile iron (65-45-12) body and double strap type. Straps shall be 304 (18-8) SS with Teflon coated threads. Saddle body shall have 10-mil fusion applied, nylon coating. Saddles for PVC piping shall be pre-formed at the factory to the exact pipe size to avoid overstressing the pipe during installation.

825.03 INSTALLATION

Following successful testing and acceptance of the new water mains, connect the new services to the existing water services on the customer side of the curbstop. Installation shall follow the general AWWA standards and manufacturers latest recommendations. Curb stops and boxes for individual services shall be installed at the right-of-way limit. Curb boxes shall be installed plumb with the box lid installed flush with the finish grade. Curb stops and boxes shall be supported so that they do not put pressure on the service line. Copper tubing shall be bedded with 200 mm (8 inches) of clean sand bedding (from 100 mm (4 inches) below to 100 mm (4 inches) above the pipe).

Water service pipes and curb stops shall be installed with the same amount of cover as specified for the associated water main (2.14 m {7 feet} unless noted otherwise on the plans). Connections to existing service pipes that have less cover than required shall be done with copper tubing and couplings on the private side of the curb stop.

Flush the service line prior to connecting to existing services. Pressurize the service line and inspect for leaks prior to backfilling.

825.04 METHOD OF MEASUREMENT

- A.) <u>Copper Water Services</u> The pipe shall be measured by the installed length to the nearest one-half (1/2) meter from the corporation stop at the water main to the installed curb stop.
- B.) <u>Corporations</u> Corporations will be measured by the number of units installed, complete and accepted in place.
- C.) <u>Curb Stops</u> Curbs stops will be measured by the number of units installed, complete and accepted in place.

825.05 BASIS OF PAYMENT

- A.) <u>Copper Service Pipe</u> The accepted and measured quantities copper pipe for water services will be paid at the contract unit price per meter for the sizes specified, complete in place. This includes: site work, site preparation, pavement cutting, excavation, shoring, dewatering, bedding material, pipe, fittings, installation, flushing, backfilling, surface restoration (where applicable), and compaction.
- B.) <u>Corporations</u> The accepted and measured quantities of corporations for water services will be paid at the contract unit price per corporation for the sizes specified, complete in place. This includes all labor, materials and equipment required to furnish and install corporations for water services as described in the contract documents. This includes: tapping the main, installation of the corporation and connection to the copper tubing.

C.) <u>Curb Stops</u> - The accepted and measured quantities of curb stops for water services will be paid at the contract unit price per curb stop for the sizes specified, complete in place. This includes all labor, materials and equipment required to furnish and install curb stops and boxes for water services as described in the contract documents. This includes connecting the copper tubing to the curb stop installing the curb stop and box, and connecting to the existing service as required, including adaptors, stainless steel inserts, or other fittings that are necessitated by the make-up of the existing service.

Payment will be made under:

Pay Item		Pay Unit
825.311	19 mm (3/4") Corporation	each
825.312	19 mm (3/4") Curb Stop	each
825.41	19 mm (3/4") Copper Service	linear meter

SPECIAL PROVISION Section 827

TRENCH INSULATION

827.01 GENERAL

Furnish all labor, materials, equipment and appurtenances necessary to install the trench insulation as specified in the Contract Documents Trench insulation refers to insulation board installed between mains and storm drains or over mains where cover is insufficient or where it is otherwise specified.

827.02 MATERIALS

Trench insulation shall be extruded polystyrene plastic foam insulation board equal to STYROFOAM brand as manufactured by the Dow Chemical Company and as meeting ASTM C-578 Type IV. Insulation shall be Dow STYROFOAM T&G, or Owens Corning Foamular 250 T&G, or equal. Insulation shall be 50mm (2") thick and have a minimum compression strength of 25 psi (ASTM D-1621).

827.03 INSTALLATION

The insulation shall be a minimum of 0.6m (2 feet) wide and shall extend a minimum of 150mm (6") beyond the outside edge of the pipe. The insulation thickness shall be 50mm (2") unless otherwise specified on the drawings or required by the Engineer. <u>All</u> ductile iron pipe and copper tubing on this project shall be insulated.

The insulation shall be installed on top of a smooth, flat surface of compacted select backfill or bedding. The insulation shall be 150mm (6") above the top of the pipe. Joints shall be butted tightly for maximum protection. Backfilling over the insulation shall be done by hand for the first 200mm (8") and compacted before remaining backfill is applied.

Installation for each type of insulation shall be according to the manufacturers' recommendations. In general, backfill shall be clean, dry, and be free of any material which can dissolve or harm the plastic such as petroleum products.

827.04 BASIS OF PAYMENT

This item includes all labor, materials and equipment required to furnish and install trench insulation as described in the contract documents. This includes insulation and installation. Measurement of each linear meter installed shall be based on a thickness of 50mm (2") and width of 0.6m (2").

Payment shall be made under:

Pay Item Pay Unit
827.33 Trench Insulation linear meter

SPECIAL PROVISION Section 830

HDPE PIPE BY HORIZONTAL DIRECTIONAL DRILLING

830.01 GENERAL

Furnish all labor, materials and equipment necessary to install and test high-density polyethylene (HDPE) pipes by the horizontal direction drilling (HDD) method.

The HDPE pipes to be installed by HDD are shown on the project drawings and are as summarized in the following table:

<u>Location/Description</u> <u>Pipe</u>

River Crossing 250 mm (10") SDR 9 HDPE Steel Pipe Size

The HDPE water main shall be as specified below. Note pipe is specified as 250mm to obtain a minimum inside diameter of 203 mm (8") to correspond to size of existing water main.

830.02 REFERENCES

The following publications and/or standards may be referenced in this specification.

ASTM F 1962-99 Standard Guide for Maxi-Horizontal Directional Drilling

for Placement of Polyethylene Pipe or Conduit Under

Obstacles, Including River Crossings

DCCA Directional Drilling Contractors Association Guidelines

for a Successful Directional Crossing Bid Package.

830.03 SUBMITTALS

- Any proposed deviations from the alignment or profile shown on the Project Drawings and the reasons for such.
- A description of the equipment to be used on the job site, including equipment used to locate the drilling head during construction.
- Technical data for proposed sleeve and inner pipes (where applicable), including calculations demonstrating suitability for installation and long-term performance.
- Material description and Data Safety Sheets for the proposed drilling slurry.
- An estimate of the volume of drilling slurry that will require off-site disposal and the location of the slurry disposal facility.
- Product Data: pipe materials, pipe fittings, and accessories (per Pipe Specification).
- Manufacturer's Certificate: Certify all pipe and fittings meet or exceed standard specifications to which the material is manufactured.
- Details of proposed pipe joining methods.
- Detailed drilling procedure for each crossing, including drill site layout and proposed schedule.

830.04 DRILLING SLURRY

A bentonite based drilling slurry shall be utilized. The slurry may include polymer extenders. The slurry shall be a mixture that will harden into a stable clay substance around the outside of the pipe, leaving no voids and allowing no settlement of ground after installation. The slurry shall be recycled to minimize material and water requirements.

830.05 HORIZONTAL DIRECTIONAL DRILLING

- A.) Preparation Furnish submittals as specified elsewhere. Comply with project Sitework specifications, including erosion control and traffic control. Coordinate with all affected parties, including the utilities and MDOT. Review existing subsurface data available from MDOT. MDOT boring shows the ledge surface to be over 20 meters below grade at the bridge alignment. Obtain any additional subsurface data needed (no additional amounts will be paid for borings or test pits). Apply for and obtain any permits needed.
- B.) <u>Drilling Slurry Containment and Disposal</u> Construct suitable pits and provide all necessary equipment to contain and handle the drilling slurry. Site-generated (original) material (except bituminous concrete) shall be stored on-site and used to backfill pits and excavations. All stockpiled material shall be stored outside of wetlands buffer zones (see Drawings, where applicable).
- C.) <u>Drilling Process</u> Drilling shall be accomplished by a mechanical means with fluid assist. Fluid cutting will not be permitted.

Drill shall be capable of accepting a variety of cutting bits for varied soil conditions and have the ability to move rock or ledge material out of the way by drill force.

Contractor will arrange for connection to supply water for mixing drilling fluid. Water for the staging end will be provided by Owner from a hydrant connected to the public water supply. Coordinate with Utility District for proper backflow prevention and allowable demands and times.

Owner shall have access at all times to any measuring or gauging devices used for the horizontal drill as well as any drilling logs maintained by the Contractor.

Drill bit shall be equipped with a signal generator providing constant output for continuous path monitoring.

Contractor shall locate the drill head during the drilling process and have the ability to steer the drill string to achieve the alignment indicated on the Drawings.

Drill frame shall be equipped with an electric strike safety system capable of indicating electrical contact through both current and voltage sensing. The strike system shall include warning strobe lights on both the drill frame and the power unit. Grounding mats which are bonded to the drill frame shall be provided for

the operator. Appropriate safety precautions shall be observed in accordance with the device manufacturer's recommendations.

In the event that the Contractor must abandon the drill hole before completion of the crossing, the Contractor will seal the borehole and re-drill the crossing at no extra cost to Owner.

- Drilling Alignment The drilling alignment shall conform to the lines and grades indicated on the Drawings. The deflection of the alignment shall not exceed the appropriate permissible pipe deflections as specified by the pipe manufacturer. Contractor shall keep Owner informed as to any deviations from the proposed alignment which may be occurring and the reasons for such. Ground entry and exit angles shall be as listed on the Drawings, plus or minus 2 degrees unless specifically noted. The actual exit point shall be no more than 3 meters left or right of the alignment for the proposed exit point. The actual exit point shall be no more than 3 meters short of or 10 meters beyond the proposed exit point. Variation from the above parameters shall not be permitted without authorization of the Owner.
- E.) Pullback Contractor shall provide adequate support rollers for the pipe line during pullback of the pipe string into the pre-drilled hole. The rollers and cradles shall be of a type that will be of sufficient number to prevent over-stressing due to sag bends during the pullback procedure. Pipe shall be sealed and then attached by means of a swivel pull device to a back reamer of sufficient size for the finished borehole diameter. The Contractor shall not exceed the minimum bending radius of the pipe line as specified by the pipe manufacturer. The bending radius to be used shall be approved by Owner if less than shown on the Drawings. Contractor shall limit the longitudinal pull on the pipe line so as not to exceed the allowable pipe strength specified by the pipe manufacturer. Contractor will continuously monitor the longitudinal pulling forces during pipe line pullback.
- F.) <u>As-Built Drawings</u> Contractor will provide as-built drawings of the complete crossing.

830.06 HDPE PIPE MATERIALS

A. <u>Pipe and Fittings</u>

Materials used for the manufacturing of polyethylene pipe and fittings shall be PE 3408 High Density Polyethylene (HDPE) meeting the ASTM D3350 cell classification of 345434C. The material shall have a minimum Hydrostatic Design Basis (HDB) of 1600 psi at 73 degrees F when tested in accordance with PPI TR-3 and shall be listed in the name of the pipe and fitting manufacturer in PPI TR-4. The Manufacturer shall certify that the materials used to manufacture pipe and fittings meet the requirements of this specification.

Polyethylene fittings shall be made from material meeting the same requirements as the pipe. Polyethylene fittings shall be molded or fabricated by the manufacturer of the pipe. Where applicable, fittings shall meet the requirements of AWWA C906. Molded fittings

shall be manufactured in accordance with either ASTM D2683 (socket fused) or ASTM D3261 (butt fused) and shall be so marked.

Pipe shall be SDR 9 with a 200 psi pressure rating. Pipe shall be Driscopipe 1000 or approved equal. Fittings and flange adapters shall be molded.

B. <u>Mechanical Joint Fittings</u>

Mechanical joint compact fittings shall be ductile iron Class 350, tar coated and shall include gaskets and corten bolts. Fittings shall be in accordance with AWWA C-153, AWWA C111 for joints and AWWA C104 for cement lining.

All fittings for buried service shall be mechanical joint. Fittings shall be manufactured by Tyler, U.S. Pipe, Griffin, Union or approved equal.

The mechanical joint restrainers shall be installed according to AWWA standards and the manufacturer's latest recommendations.

830.07 PIPE AND FITTING FUSION

Connections from polyethylene to ductile iron shall utilize a mechanical joint as shown on the drawings.

Joints between plain ends of polyethylene pipe shall be made by butt fusion. The pipe manufacturer's fusion procedures shall be followed at all times as well as the recommendations of the fusion machine manufacturer. The wall thicknesses of the adjoining pipes shall have the same DR at the point of fusion.

When saddle connections are fusion welded the manufacturer's recommended saddle fusion procedures shall be used.

If mechanical fittings (which are designed for, or tested and found acceptable for use with polyethylene pipe) are utilized for transitions between pipe materials, repairs, joining pipe sections, saddle connections, or at other locations, the recommendation of the mechanical fitting manufacturer must be followed. These procedures may differ from other pipe materials.

Pipe fuser shall be certified by Pipe Manufacturer or Supplier as a certified pipe fuser. Submit a copy of certification to Engineer.

On each day butt fusions are to be made, the first fusion of the day shall be a trial fusion. The trial fusion shall be allowed to cool completely, then fusion test straps shall be cut out. The test strap shall be 12" (300mm) or 30 times the wall thickness in length (minimum) and 1" (25mm) or 1.5 times the wall thickness in width (minimum). Bend the test strap until the ends of the strap touch. If the fusion fails at the joint, a new trial fusion shall be made, cooled completely and tested. Butt fusion of pipe to be installed shall not commence until a trial fusion has passed the bent strap test.

Socket and saddle fusions shall be tested by a bent strap test as described by the pipe manufacturer. The pipe manufacturer shall provide visual guidelines for inspecting the butt, saddle, and socket fusion joints.

830.08 INSTALLATION

Installation shall follow the general AWWA standard for installation of polyethylene water mains. The only exception is that backfill material for buried pipes shall have no stones larger than 2 inches (50mm) in diameter. Installation shall also follow the manufacturer's latest recommendations.

All trench excavations shall be extended to at least 6 inches (150mm) below the bottom of the pipe and then brought to grade with screened base gravel (1" (25mm) max. stone). The pipe shall be placed on this bed and bedded with compacted screened base gravel (1" (25mm) max. stone) to 6 inches (150mm) above the pipe. Backfill to grade shall be per MDOT Section 206.

Foreign material shall be prevented from entering the pipe at all times (including during storage, installation and while in the trench). No debris, tools, clothing, trench water, or other materials shall be placed in the pipe at any time. Immediately following installation of a pipe in the trench (prior to backfilling and moving of trench box) a secure cap or plug shall be installed in the end of the pipe. The cap or plug shall be steel or plastic and shall be gasketed and designed to prevent debris and water from entering the pipe during excavation work.

830.09 METHOD OF MEASUREMENT

<u>HDPE Pipe by HDD</u> – The pipe shall be measured by the installed length to the nearest one-half (1/2) meter continuous through fittings.

830.10 BASIS OF PAYMENT

<u>HDPE Pipe by HDD</u> – The accepted and measured quantities of HDPE pipe will be paid at the contract unit price per meter for the types and sizes specified, complete in place. This includes all labor, materials and equipment required to install the pipe as described in the contract documents. This includes: permits, subsurface exploration, erosion control measures, excavation, drilling and receiving pits, drilling, all drilling related items, HDPE pipe, fusing, installation of pipe, bedding, all fittings and adapters required to connect to the ductile iron water main, testing, disinfection, backfill, cleanup and surface restoration.

Payment shall be made under:

Pay Item
830.20 250 mm (10") HDPE Pipe by HDD
Linear meter

SPECIAL PROVISION Section 832

WATER MAIN TESTING

832.01 GENERAL

Furnish all labor, materials and equipment required to test all water mains (including ductile iron and HDPE) as specified in the contract documents. All mains shall be tested prior to acceptance. All flushing and testing shall be done in the presence of the Engineer. The Contractor shall notify the Engineer at least 48 hours in advance of any testing.

The testing methods described in this section are specific for water-pressure testing. These procedures should not be applied for air-pressure testing because of the serious safety hazards involved. Air-pressure testing is <u>not</u> allowed.

Operation of gate valves in the existing water system shall only be done by authorized staff of the Water District

832.02 PROCEDURE

After the pipe has been laid and completely backfilled, the Contractor shall perform the water main test. The test shall be in accordance with AWWA C600 except as herein specified. The test shall have a duration of 2 hours. The test pressure at all points in the pipe shall be at least 1.5 times the maximum working pressure in the pipe. The minimum test pressure at any point in the pipe shall be 150 psi. Test pressure shall not vary by more than 5 +/- psi for the duration of the test.

Each valved section of pipe shall be slowly filled with water and all air shall be expelled from the pipe. If permanent air vents are not located at all high points, the Contractor shall install corporations at such points so the air can be expelled as the pipe is filled with water.

Flush all water main pipe prior to testing. Flushing shall be accomplished by installing a 2" (50mm) diameter temporary tap/blowoff.

After expelling all air from the main and properly flushing it, the specified test pressure shall be applied. The test pressure shall be applied, based on the lowest point of the line under test and corrected to the elevation of the test gauge. Pressure shall be applied by means of a pump connected to the pipe in a manner satisfactory to the Utility and Engineer. The pump, piping, connections and all necessary apparatus for conducting the test shall be furnished by the Contractor. The Utility may supply the gauges for the test. The Contractor shall furnish and install all necessary caps, plugs, taps, blowoffs, piping and valves needed to flush and test the pipe. The Contractor shall remove all tubing and piping from the main once all necessary testing has been completed and install approved plugs.

All exposed pipe, fittings, valves, hydrants, and joints shall be examined carefully during the test. Any damaged or defective pipe, fittings, valves, hydrants, or joints that are discovered during the pressure test shall be repaired or replaced with sound material, and the test shall be repeated.

832.02 ACCEPTANCE

Leakage shall be defined as the quantity of water that must be supplied into the new pipe or any valved section thereof to maintain pressure within 5 psi of the specified test pressure for the duration of the test.

Acceptance shall be determined on the basis of allowable leakage. If any test of pipe discloses leakage greater than that specified in the following table, the Contractor shall, at his own expense, locate, make approved repairs and retest as necessary until the leakage is within the specified allowance.

The allowable leakage from the water main shall be as specified in the following table:

<u>Inside</u>	<u>Inside</u>	
Pipe Diameter	Pipe Diameter	Allowable Leakage
(mm)	(inches)	(gph / 305 m)
100	4	0.37
150	6	0.55
200	8	0.74
300	12	1.10

832.03 BASIS OF PAYMENT

Water Main Testing is incidental to pipe installation as specified in Ductile Iron Pipe and Appurtenances - Section 822 and HDPE Pipe by Horizontal Directional Drilling - Section 830.

SPECIAL PROVISION Section 833

WATER MAIN DISINFECTION

833.01 GENERAL

Furnish all labor, materials and equipment required to disinfect all water mains as specified in the contract documents. All water mains shall be disinfected prior to acceptance. All disinfection shall be done in the presence of the Engineer. The Contractor shall notify the Engineer at least 48 hours in advance of any disinfection. All work under this Section shall comply with AWWA C-651 except as herein specified. All taps and apparatus required for testing and disinfection shall be the responsibility of the Contractor per Special Provision Section 822.

833.02 PREVENTATIVE MEASURES

Prevent contaminating materials from entering the pipe during installation. Plugs shall be used where necessary during installation of the pipe to prevent the pipe from being contaminated with mud and silt. All gaskets and lubricants shall conform to AWWA standards. In no case shall petroleum based lubricants be used.

833.03 FLUSHING AND TESTING

The water main shall be flushed and tested prior to disinfection as outlined in Special Provision Section 832 WATER MAIN TESTING.

833.04 APPLICATION OF CHLORINE

The required method of disinfecting the water main is by uniform continuous injection of a hypochlorite solution into the main while flowing one source. The chlorine shall be fed into the main at a measured rate so that the entire main is chlorinated to a concentration of 50 mg/l. The chlorine shall be retained in the main for at least 24 hours. At the end of 24 hours the chlorine concentration in the main shall be at least 25 mg/l.

Slug Methods of disinfection shall not be allowed. Hypochlorite solutions shall utilize sodium hypochlorite (liquid), solutions shall not be mixed from tablets or powdered hypochlorite.

833.05 FINAL FLUSHING OF MAINS

After the required retention period, the heavily chlorinated water shall be flushed from the main until the chlorine concentration in the main is no higher than water in the system or is acceptable for domestic use. The Contractor shall be responsible for the proper disposal/dechlorination of the highly chlorinated water, per Department of Human Services and DEP regulations.

833.06 BACTERIOLOGICAL TESTING

After the required retention period, the heavily chlorinated water shall be flushed from the main until the chlorine concentration in the main is no higher than water in the system or is acceptable for domestic use. Pressure Gauges shall be installed on existing pipes that are used to feed flushing water to the new main to allow for pressure monitoring. System pressure shall be maintained at a minimum of 20 psi. If the pressure in the existing system drops below 20 psi, flushing will be stopped until the system has recovered enough to safely start flushing again. The Contractor shall be responsible for the proper disposal/dechlorination of the highly chlorinated water, per Department of Human Services and DEP regulations.

After final flushing and before the water main is placed in service, initial samples shall be collected from the water main for bacteriological testing per State of Maine regulations and AWWA specifications. Twenty-four (24) hours after collecting the initial samples, confirmation samples shall be collected. The tests shall be done in accordance with Standard Methods and shall be done by a State Certified Laboratory. If both the initial and confirmation tests show that the samples meet State coliform and bacteria standards then the main shall be placed in service.

If the initial tests fail, the main shall be reflushed and resampled. If these tests fail, the main shall be rechlorinated and the process repeated at the Contractor's expense until satisfactory results are obtained.

The Utility District or Engineer will collect the bacteriological samples and provide the testing. Samples are required at 1200 ft. (365m) maximum spacing.

833.07 BASIS OF PAYMENT

Water Main Disinfection is incidental to ductile iron pipe installation as specified in Ductile Iron Pipe and Appurtenances - Section 822.

Jackman 10516.50 October 4, 2004

SPECIAL PROVISION SECTION 835 Boat Ramp

<u>Description</u> This work shall consist of the installation of boat ramps as indicated in the Bid Book, Plans, or as directed by the Resident.

Installation of the boat ramp includes all required excavation, concrete and formwork as well as all reinforcing steel fabricated and delivered, reinforcing steel installation, pressure treated curbing, keel guard, and risers, anchor bolts, pulley, post, concrete base, all required fasteners and hardware necessary to complete the boat ramp including all field welding labor and consumables in addition to any required cold galvanization, concrete steps as shown on the plans. In addition all required excavation, material storage, rehandling and regrading of earthen material removed to construct the boat ramp shall be paid for under this item. All seeding of the material excavated and regraded around the boat ramp shall be paid for under this item.

Construction Requirements Temporary erosion control blanket shall be placed around the boat ramp as indicated by the Resident in the field, this shall be paid for seperately, and shall not be considered to be paid for under this item. All material excavated shall be stockpiled for reuse and regrading around the finished boat ramp. The finished regrading shall be such that water drains away from the boat ramp steps and not down over them. It shall be graded to present a neat and uniform appearance free of large stones or clumps of material on the surface. Concrete shall meet all applicable requirements of section 502 of the standard specifications. Once the pulley assembly is field welded to the pulley post the contractor shall apply 2 coats of cold galvanization in accordance with manufacturers published recommendations.

Materials All concrete required to construct the boat ramp and post base shall meet the requirements of Class A concrete according to the Standard Specifications. All reinforcing steel shall be ASTM A615 grade 420. All hardware shall be galvanized in accordance with ASTM A 153 with the exception of the pulley and pulley bolt which shall be stainless. The material for the pulley should meet the requirements of AISI Type 316 Stainless Steel, and shall be complete with hub and bronze bushing. Stainless steel bolt, nut, and washer meeting the requirements of AISI Type 316 as indicated on the Boat Launch Detail Sheet. 6 mm steel plates as shown on the boat launch details sheet shall be grade 316 stainless. Welding electrode to field weld the pulley plate assembly to the top of the post shall be A309 electrode or approved alternate. All other steel shall meet the requirements of ASTM A36 and shall be hot dip galvanized to the requirements of ASTM A123. All timber components to be incorporated into the final work product shall be pressure treated with either ACA or CCA. Caulking shall be a high quality polyurethane exterior caulking with a gray color to closely match that of weathered pressure treated wood.

<u>Method of Measurement</u> Boat ramp shall be measured by the lump sum, complete in place, concrete cast, cured stripped, timber curbs, timber keel guide installed all nuts adequately tightened, recessed and caulked. Pulley post painted. Pulley post, pulley, and base installed and operational. All earthen material regraded around the ramp, seeded, and mulched.

<u>Basis of Payment</u> Payment for Boat Ramp shall be full compensation for all equipment, labor, and incidental materials necessary to construct and install the boat ramp as specified above.

Pay Item	<u>Description</u>	<u>Pay Unit</u>
835.15	Boat Ramp	LS



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X	FEMA (unmapped)	N/A □	Applicable□	Approved
[X]	Maine Department of Environmental Protection	(MDFP) Site	Location of Develo	nnment
		oved \square	Location of Develo	phient
X	9, ,			
	Is the project something other than the highway an	d bridge syster	n, such as a mainter	ance lot, building/parking facility? Yes
	☐ No ☑ If no, the project is exempt. If yes, continue. Does the town in which the proj	ant is loosted l	nava a aamprahansii	yo plan consistent with the Growth
	Management Program? Yes □ No □. If no, the			e plan consistent with the Growth
Ιfν	f yes, local zoning ordinances and/or permits are neede		Approved \square	
)	- y ,			
X	*			t
	Eagle Nest N/A 🗵 Appli		Approved □	
	Piping Plover N/A ⊠ Appli		Approved □	
	Roseate Tern N/A 🗵 Appli	cable	Approved □	
X	☑ United States Fish and Wildlife Service (USFW	S) Migratory	Rird Act	
	$N/A \boxtimes Applicable \square$	o,, migratory	Diru Acc	
X		ıds, Submerge	ed Land Lease	
	$N/A \boxtimes Applicable \square$			
X	■ Land Use Regulation Commission (LURC)	Not Applicat	ole	
	No permit □	• • •		
	Notice □		Approved □	
	Permit \square		Approved □	
X	Maine Department of Environmental Protection	n (MDFP) No	ntural Resource Pr	atection Act
	No permit required \square	ii (MDE1), 14a	iturai Resource i i	Action Act
		t use erosion ar	nd sediment control	and not block fish passage.)
	PBR ⊠		Approved ⊠	
	Tier 1 □		Approved □	
	Tier 2 □		Approved □	
	Tier 3 \square		Approved □	
XI		the Rivers an	d Harbors Act and	Section 404 of the Clean Water Act
	Army corps of Engineers (ACOE), Section 10 of	the Kivers an	iu Harbors Act and	Section 404 of the Clean Water Act.
	No permit required \square			
	Category 1-NR□		Approved □	
	Category 2⊠		Approved ⊠	
	Category 3□		Approved □	
XI	▼ IN-WATER TIMING RESTRICTIONS: 105 Sp	ecial Provision	n ⊠ n/a □	
ш	Dates instream work is allowed: 11/16 – 9/14	cciai i iuvisiui	1 11/a L	

Special Provision 656, Erosion Control Plan

Boxes marked in red indicate items that are attached and need to be placed in the contract by the Project Manager.

DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) PERMIT BY RULE NOTIFICATION FORM

(For use with DEP Regulation, Chapter 305)

MDOT PIN: 10106.00

☐Sec. (16) Coastal Sand Dune Projects

Name of Applicant: State of Maine Department of Transportation Name of Contact: David Gardner Mailing Address: 16 Station State House Town/City: Augusta State: Me. Zip Code: 04330-0016 Daytime Telephone #: (207)-624-3105 Name of Wetland, Water Body or Stream: Moose River

Detailed Directions to Site: This bridge project is located on Route 6/201 over the Moose River, approximately 1.70 miles north of Route 6/15.

Town/City: Jackman Map #: N/A Lot #: N/A County: Somerset

⊠No

□Yes

Description of Project: MDOT is planning to replace the existing bridge over the Moose River. A temporary bridge will be constructed upstream from the existing bridge. The project will be performed in accordance with erosion control measures conforming with the latest versions of the State of Maine Department of Transportation Standard Specifications for Highways and Bridges and the Department of Transportation's Best Management Practices for Erosion and Sediment Control.

Part of a larger project? (CHECK ONE) This project... ☑ does ☐ does not ...involve work below mean low water. I am filing notice of my intent to carry out work which meets the requirements for Permit By Rule (PBR) under DEP Regulation, Chapter 305. I have a copy of PBR Sections checked below. I have read and will comply with all of the standards. □Sec. (2) Soil Disturbance ☐Sec. (8) Shoreline stabilization □Sec. (14) Piers, Wharves & Pilings ☐Sec. (3) Intake Pipes ☐Sec. (9) Utility Crossing □Sec. (15) Public Boat Ramps ☐Sec. (4) Replacement of Structures □Sec. (10) Stream Crossing

☐Sec. (5) REPEALED ⊠Sec. (11) State Transport. Facilities □Sec. (17) Transfers/Permit Extension □Sec. (6) Movement of Rocks or Vegetation ☐Sec. (12) Restoration of Natural Areas ☐Sec. (18) Maintenance Dredging

☐Sec. (7) Outfall Pipes □Sec. (13) F&W Creation/Enhance/Water Quality Improvement

I authorize staff of the Departments of Environmental Protection, Inland Fisheries & Wildlife, and Marine Resources to access the project site for the purpose of determining compliance with the rules. I also understand that this permit is not valid until approved by the Department or 14 days after receipt by the Department, whichever is less.

I have attached all of the following required submittals. NOTIFICATION FORMS CANNOT BE ACCEPTED WITHOUT THE NECESSARY ATTACHMENTS:

A \$55 (non-refundable) payment shall be done by internal billing.

Attach a U.S.G.S. topo map or Maine Atlas & Gazetteer map with the project site clearly marked.

Attach photographs showing existing site conditions (unless not required under standards).

Signature of Applicant:

John E. Dority, Chief Engineer

Keep the bottom copy as a record of permit. Send the form with attachments via certified mail to the Maine Dept. of Environmental Protection at the appropriate regional office listed below. The DEP will send a copy to the Town Office as evidence of the DEP's receipt of notification. No further authorization by DEP will be issued after receipt of notice. Permits are valid for two years. Work carried out in violation of any standard is subject to enforcement action.

AUGUSTA DEP STATE HOUSE STATION 17 AUGUSTA, ME 04333-0017 (207)287-2111 PORTLAND DEP 312 CANCO ROAD PORTLAND, ME 04103 (207)822-6300 BANGOR DEP 106 HOGAN ROAD BANGOR, ME PRESQUE ISLE DEP 1235 CENTRAL DRIVE PRESQUE ISLE, ME 04769 (207)764-0477 04401 (207)941-4570

OFFICE USE ONLY PBR# FP

Ck.#

Staff

Date

Acc. Date

Staff Def. Date

After Photos

Chapter 305: PERMIT BY RULE Section 11 State Transportation Facilities

1. Introduction. A "permit by rule" or "PBR", when approved by the Department of Environmental Protection (DEP), is an approval for an activity that requires a permit under the Natural Resources Protection Act (NRPA). Only those activities described in this chapter may proceed under the PBR process. A PBR activity will not significantly affect the environment if carried out in accordance with this chapter, and generally has less of an impact on the environment than an activity requiring an individual permit. A PBR satisfies the Natural Resources Protection Act (NRPA) permit requirement and Water Quality Certification requirement.

If a proposed activity is not described in this chapter, or will not be conducted in accordance with the standards of this chapter, the applicant must obtain an individual permit prior to beginning the activity.

- **A.** Location of activity. The location of an activity may affect whether an activity qualifies for PBR, and whether review by the Department of Inland Fisheries and Wildlife is required.
 - (1) Type of resource. For some types of activities, the availability of a PBR is affected by the type of natural resource in or adjacent to which the activity is proposed. For example, an applicant proposing an activity consisting of "Movement of rocks or vegetation" may receive a PBR only if the activity will take place in a great pond, river, stream or brook. Limitations concerning the location of activities are addressed in the "Applicability" provision in each section of this chapter.
 - (2) Essential habitat. Essential habitats include areas critical to the survival of threatened and endangered species such as the bald eagle, least tern, roseate tern, and piping plover. If the activity is located in essential habitat, such as near an eagle nesting site, a PBR is only available if the applicant obtains written approval from the Department of Inland Fisheries and Wildlife (IF&W). This approval from IF&W must be submitted to the DEP with the PBR notification form, and the applicant must follow any conditions stated in the IF&W approval.
- NOTE: Maps showing areas of essential habitat are available from the Department of Inland Fisheries and Wildlife regional headquarters, municipal offices, the Land Use Regulation Commission (for unorganized territories) and DEP regional offices. If the activity is located in essential habitat, IF&W must be contacted to request and obtain a "certification of review and approval".
- **B.** Notification. The applicant must file notice of the activity with the DEP prior to beginning work on the activity. The notification must be on a form provided by the DEP and must include any submissions required in this chapter. The applicant must keep a copy to serve as the permit.

The notification form must be sent to the DEP by certified mail (return receipt requested), or hand delivered to the DEP and date stamped by the department.

C. Effective period

(1) Beginning of period. The PBR becomes effective 14 calendar days after the DEP receives the notification form, unless the DEP approves or denies the PBR prior to that date. If the DEP does not speak with or write to the applicant within this 14 day period regarding the PBR notification, the applicant may proceed to carry out the activity.

There are three exceptions regarding the effective date of an approved PBR:

- (a) Activities listed in Section 10 (Stream crossings) occurring in association with forest management are exempt from the 14 day waiting period.
- (b) Activities listed in Section 2 (Soil disturbance) and Section 10 (Stream crossings) performed or supervised by individuals currently certified in erosion control practices by the DEP are exempt from the 14 day waiting period. To be certified in erosion control practices, an individual must successfully complete all course requirements of the Voluntary Contractor Certification Program administered by the DEP's Nonpoint Source Training and Resource Center.
- (c) Activities that are part of a larger project requiring a permit under the Site Location of Development or the Storm Water Management Acts may not proceed until any required permit under those laws is obtained.
- NOTE: Activities that are part of a larger project may require other permits from the DEP also. These other laws may prohibit the start of construction of any part of the project unless a permit under that law is obtained. In these cases, while not a violation of this rule, starting work on a PBR approved activity would be a violation of those other applicable laws.
- (2) End of period. The PBR is generally effective for 2 years from the date of approval, except that a PBR for "Replacement of structures" under Section 4 is effective for 3 years.
- NOTE: Activities that qualify under this chapter may need to meet other local, state and federal requirements. Examples -- (1) If an activity extends below the low water line of a lake, coastal wetland or international boundary water, the applicant should contact the Bureau of Parks and Lands (287-3061) concerning possible lease or easement requirements, or (2) If an activity will involve work below the mean high water line in navigable waters of the United States, the applicant should contact the Army Corps of Engineers (623-8367).
- **D. Discretionary authority.** Notwithstanding compliance with the PBR applicability requirements and standards set forth in this chapter, the DEP may require an individual permit application to be filed in any case where credible evidence indicates that the activity:
 - (1) May violate the standards of the NRPA (38 M.R.S.A. Section 480-D);
 - (2) Could lead to significant environmental impacts, including cumulative impacts; or
 - (3) Could adversely impact a resource of special concern.

If an individual permit is required pursuant to this subsection, the DEP shall notify the applicant in writing within the 14 calendar day waiting period described in sub-section (C) above. When the DEP notifies an applicant than an individual permit is required, no work may be conducted unless and until the individual permit is obtained.

- **E. Violations.** A violation of law occurs when a person, or his or her agent, performs or causes to be performed any activity subject to the NRPA without first obtaining a permit from the DEP, or acts contrary to the provisions of a permit. The person, his or her agent, or both, may be held responsible for the violation. Commonly, the "person" is the landowner, and the "agent" is the contractor carrying out the activity. A violation occurs when:
 - (1) An activity occurs that is not allowed under PBR, whether or not a PBR notification form has been filed with and/or approved by the DEP;
 - (2) An activity occurs that is allowed under PBR, but a PBR for the activity has not become effective prior to the beginning of the activity; or
 - (3) An activity occurs that is allowed under PBR and a PBR for the activity is in effect, but the standards specified in this chapter are not met.

See the "applicability" provision under each activity for rules concerning what activities are allowed under PBR. A PBR is only valid for the person listed on the notification form, or for his or her agent.

Each day that a violation occurs or continues is considered a separate offense. Violations are subject to criminal penalties and civil penalties of not less than \$100 nor more than \$10,000 for each day of that violation (38 M.R.S.A. Section 349).

NOTE: A local Code Enforcement Officer (CEO) may take enforcement action for a violation of the Natural Resources Protection Act if he or she is authorized to represent a municipality in District Court, and he or she has been certified as familiar with court procedures, 30-A M.R.S.A. Section 4452(7).

Chapter 305 Section 11

State transportation facilities

A. Applicability

- (1) This section applies to the maintenance, repair, reconstruction, rehabilitation, replacement or minor construction of a State Transportation Facility carried out by, or under the authority of, the Maine Department of Transportation or the Maine Turnpike Authority, including any testing or preconstruction engineering, and associated technical support services.
- (2) This section does not apply to an activity within a coastal sand dune system.

NOTE: The construction of a transportation facility other than roads and associated facilities may be subject to the Storm Water Management Law, 38 M.R.S.A. Section 420-D.

B. Standards

- (1) Photographs of the area to be altered by the activity must be taken before work on the site begins. The photographs must be kept on file and be made available at the request of the DEP.
- (2) The activity must be reviewed by the Department of Inland Fisheries and Wildlife, the Department of Marine Resources, the Atlantic Salmon Authority, and the DEP's Division of Environmental Assessment prior to the notification being filed with the DEP. The activity must be performed according to any recommendations from these authorities.
- (3) The activity must be performed in accordance with erosion control measures conforming with the State of Maine Department of Transportation Standard Specifications for Highways and Bridges Revision of April 1995 and with the Department of Transportation's Best Management Practices for Erosion and Sediment Control, September 1997.

NOTE: Guidance on the use of erosion control best management practices can be obtained from the on site Construction Manager.

- (4) Alignment changes may not exceed a distance of 200 feet between the old and new center lines in any natural resource.
- (5) The activity may not alter more than 300 feet of shoreline (both shores added together) within a mile stretch of any river, stream or brook, including any bridge width or length of culvert.
- (6) The activity may not alter more than 150 feet of shoreline (both shores added together) within a mile stretch of any outstanding river segment identified in 38 M.R.S.A. 480-P, including any bridge width or length of culvert.
- (7) The activity must minimize wetland intrusion. The activity is exempt from the provisions of Chapter 310, the Wetland Protection Rules, if the activity alters less than 15,000 square feet of natural resources per mile of roadway (centerline measurement) provided that the following impacts are not exceeded within the 15,000 square foot area:

- (a) 1,000 square feet of coastal wetland consisting of salt tolerant vegetation or shellfish habitat; or
- (b) 5,000 square feet of coastal wetland not containing salt tolerant vegetation or shellfish habitat; or
- (c) 1,000 square feet of a great pond.

All other activities must be performed in compliance with all sections of Chapter 310, the Wetland Protection Rules, except 310.2(C), 5(A), 9(1), 9(B) and 9(C).

- (8) The activity may not permanently block any fish passage in any watercourse containing fish. The applicant must improve passage beyond what restriction may already exist unless the Department of Inland Fisheries and Wildlife, the Department of Marine Resources, the Atlantic Salmon Authority and the DEP's Division of Environmental Assessment concur that the improvement is not necessary.
- (9) Rocks may not be removed from below the normal high water line of any coastal wetland, freshwater wetland, great pond, river, stream or brook except to the minimum extent necessary for completion of work within the limits of construction.
- (10) If work is performed in a river, stream or brook that is less than three feet deep at the time and location of the activity, with the exception of culvert installation, the applicant must divert flow away from the activity while work is in progress.
 - (a) Diversion may be accomplished by the use of stable, inert material. No more than two thirds (2/3) of stream width may be diverted at one time.
 - (b) Any material used to divert water flow must be completely removed upon completion of the activity, and the stream bottom must be restored to its original condition.
 - (c) A pump may be operated, where necessary, for a temporary diversion. The pump outlet must be located and operated such that erosion or the discharge of sediment to the water is prevented.

NOTE: Guidance on the appropriate location of a diversion and materials which should be used for a stream diversion can be obtained from the on site Construction Manager.

- (11) Wheeled or tracked equipment may not operate in the water. Equipment operating on the shore may reach into the water with a bucket or similar extension. Equipment may cross streams on rock, gravel or ledge bottom.
- (12) All wheeled or tracked equipment that must travel or work in a vegetated wetland area must travel and work on mats or platforms.
- (13) Any debris or excavated material must be stockpiled either outside the wetland or on mats or platforms. Hay bales or silt fence must be used, where necessary, to prevent sedimentation. Any debris generated during the activity must be prevented from washing downstream and must be removed from the wetland or water body. Disposal of debris must be in conformance

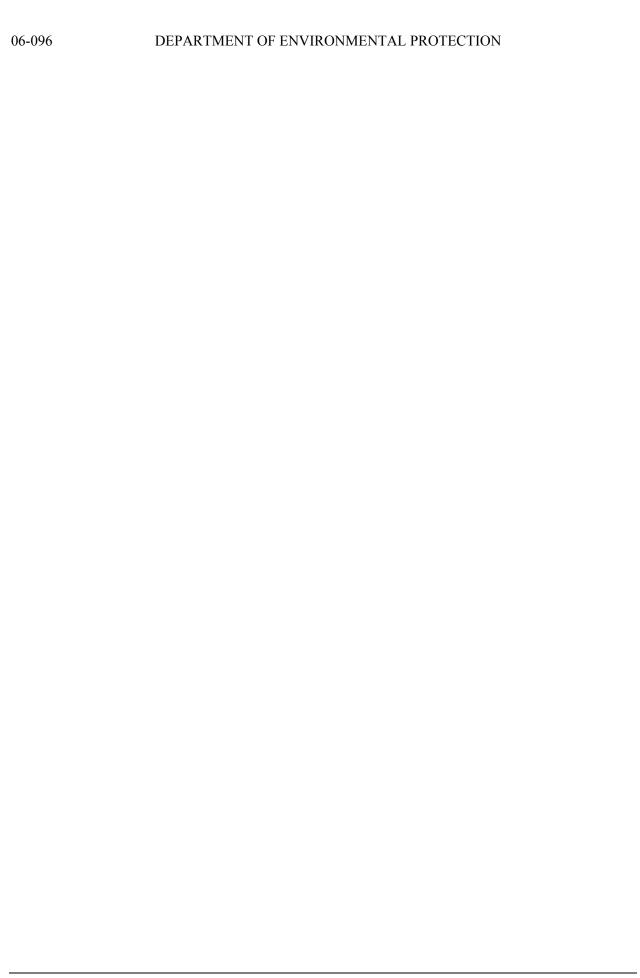
- with the Maine Hazardous Waste, Septage and Solid Waste Management Act, 38 M.R.S.A. Section 1301 <u>et seq.</u>
- (14) Work below the normal high water line of a great pond, river, stream or brook must be done at low water except for emergency work or work agreed to by the resource agencies listed in paragraph 2 above. Measures, such as a silt boom or staked fencing, must be employed to reduce and isolate turbidity.
- (15) Perimeter controls must be installed before the work starts. Disturbance of natural resources beyond the construction limits shown on the plans is not allowed under this rule.

NOTE: Guidance on the location of construction limits can be obtained from the on site Construction Manager.

- (16) The use of untreated lumber is preferred. Lumber pressure treated with chromated copper arsenate (CCA) may be used, provided it is cured on dry land in a manner that exposes all surfaces to the air for a period of at least 21 days prior to construction. Wood treated with creosote or pentachlorophenol may not be used where it will contact water.
- (17) A temporary road for equipment access must be constructed of crushed stone, blasted ledge, or similar materials that will not cause sedimentation or restrict fish passage. Such roads must be completely removed at the completion of the activity. In addition, any such temporary roads which are in rivers, streams or brooks, must allow for a passage of stormwater flows associated with a 10-year storm.
- (18) Soil may not be disturbed during any period when soils are saturated due to rain or snow melt, except as necessary to protect work in progress or as required for bridge maintenance activities. Areas where soils are saturated (i.e. water drips from the soil when squeezed by hand, or the soil is capable of being rolled into a rod 1/8th inch in diameter that does not crumble) must be immediately mulched if they are disturbed.
- (19) Disturbed soil must be protected within one week from the time it was last actively worked, and prior to any storm event, using temporary or permanent measures such as the placement of riprap, sod, mulch, erosion control blankets, or other comparable measures.
- (20) Hay bale or straw mulch, where used, must be applied at a rate of at least one bale per 500 square feet (1 to 2 tons per acre).
- (21) If mulch is likely to be moved because of steep slopes or wind exposure, it must be anchored with netting, peg and twine, binder or other suitable method and must be maintained until a catch of vegetation is established over the entire disturbed area.
- (22) In addition to the placement of riprap, sod, erosion control blankets or mulch, additional steps must be taken where necessary to prevent sedimentation of the water Evidence of sedimentation includes visible sheet, rill or gully erosion, discoloration of water by suspended particles and/or slumping of banks. Silt fences, staked hay bales and other sedimentation control measures, where planned for, must be in place prior to the commencement of an activity, but must also be installed whenever necessary to prevent erosion and sedimentation.

NOTE: Guidance on the location and proper installation of erosion control measures can be obtained from the on site Construction Manager.

- (23) Temporary erosion control measures must be maintained and inspected weekly until the site is permanently stabilized with vegetation or other permanent control measures. Erosion control measures must also be inspected immediately prior to and following storms.
- (24) Permanent erosion control measures protecting all disturbed areas must be implemented within 30 days from the time the areas were last actively worked, or for fall and winter activities by the following June 15, except where precluded by the type of activity (e.g. riprap, road surfaces, etc.). The permanent erosion control measures must be maintained.
- (25) The applicant shall immediately take appropriate measures to prevent erosion or sedimentation from occurring or to correct any existing problems, regardless of the time of year.
- (26) Non-native species may not be planted in restored areas.
- (27) Disposal of debris must be in conformance with Maine Hazardous Waste, Septage and Solid Waste Management Act, 38 M.R.S.A. Sections 1301 et seq.
- (28) Disturbance of vegetation must be avoided, if possible. Where vegetation is disturbed outside of the area covered by any road or structure construction, it must be reestablished immediately upon completion of the activity and must be maintained.
- (29) A vegetated area at least 25 feet wide must be established and maintained between any new stormwater outfall structure and the high water line of any open water body. A velocity reducing structure must be constructed at the outlet of the stormwater outfall that will create sheet flow of stormwater, and prevent erosion of soil within the vegetated buffer. If the 25 foot vegetated buffer is not practicable, the applicant must explain the reason for a lesser setback in writing. Approval from the DEP must be in writing and any recommendations must be incorporated into the activity.
- **C. Definitions.** The following terms, as used in this chapter, have the following meanings, unless the context indicates otherwise:
 - (1) Diversion. A rerouting of a river, stream or brook to a location outside of its established channel.
 - (2) Fill. a. (verb) To put into or upon, supply to, or allow to enter a water body or wetland any earth, rock, gravel, sand, silt, clay, peat, or debris; b. (noun) Material, other than structures, placed in or immediately adjacent to a wetland or water body.
 - (3) Floodplain wetlands. Freshwater wetlands that are inundated with flood water during a 100-year flood event based on flood insurance maps produced by the Federal Emergency Agency or other site specific information.
 - (4) Riprap. Rocks that are fit into place, usually without mortar, on a slope as defined in the State of Maine, Department of Transportation, Standard Specifications for Highway and Bridges, revision of April 1995.





DEPARTMENT OF THE ARMY

NEW ENGLAND DISTRICT, CORPS OF ENGINEERS 696 VIRGINIA ROAD CONCORD, MASSACHUSETTS 01742-2751

MAINE PROGRAMMATIC GENERAL PERMIT (PGP) AUTHORIZATION LETTER AND SCREENING SUMMARY

OFFICE OF ENVIRONME MAINE DEPT. OF TRANS 16 STATE HOUSE STAT AUGUSTA, MAINE 04333	SPORTATION ION		TEN AND GONEE		S PERMIT #_ S PGP ID# E ID#	NAE-2004-8	35
DESCRIPTION OF WORK: Place fill below the ordina Route 201/6 bridge. The							
river bed impact.							
PIN# 10106,00							
LAT/LONG COORDINATES :	45.6365178°	N	70.2625755°	w	USGS QUA	D: JACKMAN,	, ME
Based on our review of the informat waters and wetlands of the United Sthe Maine Programmatic General P	States. Your work is th						
You must perform the activity author Conditions and any conditions place carefully, including the PGP conditions of the PGP requirements; therefore you stood the conditions of this authorization with	ed on the State 401 Wa ons beginning on page hould be certain that w	ater Quality 5, to famili hoever doe	Certification including iarize yourself with its es the work fully unde	g any red contents rstands a	quired mitigation You are respo	. Please review the nsible for complying. You may wish	he enclosed PGP ing with all of the h to discuss the
If you change the plans or construct authorization. This office must app				ntact us i	mmediately to di	scuss modificatio	n of this
Condition 36 of the PGP (page 12) expiration of the PGP on Septembe September 29, 2006.							
No work may be started unless and limited to a Flood Hazard Develo and allow us to inspect the project. weeks before the anticipated starting	pment Permit issued Hence, you must com	by the tow	vn if necessary. Also return the attached W	o, this pe ork Start	mit requires you Notification Forn	to notify us before (s) to this office (re beginning work no later than 2
II. STATE ACTIONS: PENDIN	G[X], ISSUED[], DEN	IED[] DATE				
APPLICATION TYPE: PBR: X	, TIER 1:, TIE	R 2:	, TIER 3; , LI	URC:	DMR LEA	SE: NA:	
III. FEDERAL ACTIONS:							
JOINT PROCESSING MEETIN	G: 4/29/04	LE	VEL OF REVIEW:	CATEG	ORY 1: X	CATEGORY	2.
AUTHORITY: SEC 10			, 103	0/1120		_ OATEOORT	
EXCLUSIONS: The exclusionary				this proje	ect		
ESSENTIAL FISH HABITAT (BIF YES: Based on the terms and concentrations are supported by the Corps of the control of the contro	EFH): EFH PRESEN anditions of the PGP, w of Engineers has prelim	NT Y N which are in ninary dete	(CIRCLE ONE) tended to ensure that rmined that this project	authoriz	ed projects caus		
FEDERAL RESOURCE AGEN	CY OBJECTIONS:	EPA_NO	_, USF&WS <u>NO</u> _, N	NMFS_N	0		
If you have any questions on this m	natter, please contact n	ny staff at 2	207-623-8367 at our N	Manchest	er, Maine Projec	t Office.	

JAY I. CLEMENT SENIOR PROJECT MANAGER MAINE PROJECT OFFICE FRANK J. DELGIUDICE DATE

ACTING CHIEF, PERMITS & ENFORCEMENT BRANCH REGULATORY DIVISION



ADDITIONAL CONDITIONS FOR DEPARTMENT OF THE ARMY PROGRAMMATIC GENERAL PERMIT NO. NAE-2004-835

- 1. Adequate sedimentation and erosion control devices, such as geotextile silt fences or other devices capable of filtering the fines involved, shall be installed and properly maintained to minimize impacts during construction. These devices must be removed upon completion of work and stabilization of disturbed areas. The sediment collected by these devices must also be removed and placed upland, in a manner that will prevent its later erosion and transport to a waterway or wetland.
- 2. All exposed soils resulting from the construction will be promptly seeded and mulched in order to achieve vegetative stabilization.
- 3. The permittee shall assure that a copy of this permit is at the work site whenever work is being performed and that all personnel performing work at the site of the work authorized by this permit are fully aware of the terms and conditions of the permit. This permit, including its drawings and any appendices and other attachments, shall be made a part of any and all contracts and sub-contracts for work which affects areas of Corps of Engineers' jurisdiction at the site of the work authorized by this permit. This shall be done by including the entire permit in the specifications for the work. If the permit is issued after construction specifications but before receipt of bids or quotes, the entire permit shall be included as an addendum to the specifications. The term "entire permit" includes permit amendments. Although the permittee may assign various aspects of the work to different contractors or sub-contractors, all contractors and sub-contractors shall be obligated by contract to comply with all environmental protection provisions of the entire permit, and no contract or sub-contract shall require or allow unauthorized work in areas of Corps of Engineers jurisdiction.
- 4. Instream work shall occur from November 16 to September 14 to protect fisheries and local water quality.

Permit No: GP-39 Effective Date: Sept. 29, 2000 Expiration Date: Sept. 29, 2005

Applicant: General Public, State of Maine

DEPARTMENT OF THE ARMY PROGRAMMATIC GENERAL PERMIT STATE OF MAINE

The New England District of the U.S. Army Corps of Engineers hereby issues a programmatic general permit (PGP) that expedites review of minimal impact work in coastal and inland waters and wetlands within the State of Maine. Activities with minimal impacts, as specified by the terms and conditions of this general permit and on the attached DEFINITION OF CATEGORIES sheets, are either non-reporting (provided required local and state permits are received), or are reporting, to be screened by the Corps and Federal Resource Agencies for applicability under the general permit. This general permit does not affect the Corps individual permit review process or activities exempt from Corps jurisdiction.

Activities Covered: work and structures that are located in, or that affect, navigable waters of the United States (regulated by the Corps under Section 10 of the Rivers and Harbors Act of 1899) and the discharge of dredged of fill material into waters of the United States (regulated by the Corps under Section 404 of the Clean Water Act), and the transportation of dredged material for the purpose of disposal in the ocean (regulated by the Corps under Section 103 of the Marine Protection, Research and Sanctuaries Act).

PROCEDURES:

A. State Approvals

For projects authorized pursuant to this general permit that are also regulated by the State of Maine, the following state approvals are also required and must be obtained in order for this general permit authorization to be valid (applicants are responsible for ensuring that all required state permits and approval have been obtained):

- (a) Maine Department of Environmental Protection (DEP): Natural Resources Protection Act permit, including permit-by-rule and general permit authorizations; Site Location and Development Act permit; and Maine Waterway Development and Conservation Act.
- (b) Maine Department of Conservation: Land Use Regulation Commission (LURC) permit.
- (c) Maine Department of Marine Resources: Lease.
- (d) Bureau of Public Lands, Submerged Lands: Lease.

Note that projects not regulated by the State of Maine (e.g., seasonal floats or moorings) may still be authorized by this general permit.

B. Corps Authorizations: Category I (Non-Reporting)

Work in Maine subject to Corps jurisdiction that meets the definition of Category I on the attached DEFINITION OF CATEGORIES sheets and that meets all of this permit's other conditions, does not require separate application to the Corps of Engineers. If the State or the Corps does not contact the applicant for PBRs and Tier One permits during the State's Tier One 30-day review period, Corps approval may be assumed and the project may proceed. Refer to the Procedures Section at Paragraph E below for additional information regarding screening.

Note that the review thresholds under Category I apply to single and complete projects only (see special condition 5). Also note that Category I does not apply to projects occurring in a component of, or within 0.25 miles up and downstream of the main stem or tributaries of a river segment of the National Wild and Scenic River System (see condition 11, and page 9 for the listed rivers in Maine).

There are also restrictions on other national lands or concerns which must be met in order for projects to be eligible for authorization under this PGP. Refer to special conditions 6-13 under Paragraph F below.

Work that is not regulated by the State of Maine, but that is subject to Corps jurisdiction, is eligible for Corps authorization under this PGP in accordance with the review thresholds and conditions contained herein.

Although Category I projects are non-reporting, the Corps reserves the right to require screening or an individual permit review if there are concerns for the aquatic environment or any other factor of the public interest (see special condition 4 on Discretionary Authority). The Corps review or State/Federal screening process may also result in project modification, mitigation or other special conditions necessary to minimize impacts and protect the aquatic environment as a requirement for PGP approval.

C. Corps Authorization: Category II (Reporting – requiring screening)

APPLICATION PROCEDURES

For projects that do not meet the terms of Category I (see DEFINITION OF CATEGORIES sheets), the Corps, State, and Federal Resource Agencies will conduct joint screening meetings to review applications. If projects are concurrently regulated by the DEP or LURC, applicants do not need to submit separate applications to the Corps. For projects not regulated by DEP or LURC, applicants must submit an application to the Corps Maine Project Office for a case-by-case determination of eligibility under this general permit (Category II). Category II projects may not proceed until written notification is received from the Corps.

Category II projects which occur in a component of, or within 0.25 mile up or downstream of the main stem or tributaries of a river segment of the National Wild and Scenic River System, will be coordinated with the National Park Service (see special condition 11, and page 9 for listed rivers in Maine).

There are also restrictions on other national lands or concerns which must be met in order for projects to be eligible for authorization under this PGP. Refer to special conditions 6-14 under Paragraph E below.

Category II applicants shall submit a copy of their application materials to the Maine Historic Preservation Commission and/or applicable Indian tribe(s) at the same time, or before, they apply to the DEP, LURC, or the Corps so that the project can be reviewed for the presence of historic/archaeological resources in the project area that may be affected by the proposed work. Applications to the DEP or the Corps should include information to indicate that this has been done (applicant's statement or copy of cover letter to Maine Historic Preservation Commission and/or Indian tribe(s)).

The Corps may require additional information on a case-by-case basis as follows:

- (a) purpose of project;
- (b) 8 1/2" by 11" plan views of the entire property including property lines and project limits with existing and proposed conditions (legible, reproducible plans required);
- (c) wetland delineation for the site, information on the basis of the delineation, and calculations of waterway and wetland impact areas (see special condition 2);
- (d) typical cross-section views of all wetland and waterway fill areas and wetland replication areas;
- (e) delineation of submerged aquatic vegetation, e.g., eel grass beds, in tidal waters;
- (f) area, type and source of fill material to be discharged into waters and wetlands, including the volume of fill below ordinary high water in inland waters and below the high tide line in coastal waters;
- (g) mean low, mean high water and high tide elevations in navigable waters;
- (h) limits of any Federal navigation project in the vicinity and State Plane coordinates for the limits of the proposed work closest to the Federal project;
- (i) on-site alternatives analysis (contact Corps for guidance);
- (j) identify and describe potential impacts to Essential Fish Habitat (contact Corps for guidance);
- (k) for dredging projects, include:
 - 1) the volume of material and area in square feet to be dredged below mean high water,
 - 2) existing and proposed water depths.
 - 3) type of dredging equipment to be used,
 - 4) nature of material (e.g., silty sand),

- 5) any existing sediment grain size and bulk sediment chemistry data for the proposed or any nearby projects,
- 6) information on the location and nature of municipal or industrial discharges and occurrences of any contaminant spills in or near the project area,
- 7) location of the disposal site (include locus sheet),
- 8) shellfish survey, and
- 9) sediment testing, including physical, chemical and biological testing. For projects proposing open water disposal, applicants are encouraged to contact the Corps as early as possible regarding sampling and testing protocols.

The Corps may request additional information. Dredging applicants may be required to conduct a shellfish and/or eel grass survey and sediment testing, including physical, chemical and biological testing. Sediment sampling and testing plans should be prepared or approved by the Corps before the samples are collected.

STATE-FEDERAL SCREENING PROCEDURES:

The Corps intends to utilize the application information required by the State for its regulatory program to the maximum extent practicable and the Corps normally will not be interacting with an applicant who is concurrently making application to the DEP or LURC. Projects not regulated by the State, but needing Corps of Engineers approval, **must apply directly to the Corps**. The joint screening meeting for Category II projects will occur regularly at the Corps or State offices and will involve representatives from the DEP, the Corps, the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service.

The Corps and Federal Resource Agencies will classify the project within the State's review period, not to exceed 60 days, as: 1) approvable under the PGP as proposed; 2) needs additional information, including possible project modification, mitigation or other special conditions to minimize impacts; or 3) exceeds the terms or conditions of the PGP, including the minimal effects requirement, and an individual permit review will be required. In addition, the Corps retains the ability to exercise its discretionary authority and require an individual permit, irrespective of whether the terms and conditions of this general permit are met, based on concerns for the aquatic environment or any factor of the public interest (see special condition 4 on Discretionary Authority). All Category II projects must receive written approval from the Corps before work can proceed. If the project is not approvable as proposed, the DEP, LURC, or the Corps will contact the applicant to discuss the concerns raised. If the applicant is unable to resolve the concerns, the Corps, independently or at the request of the Federal Resource Agencies, will require an individual permit for the project. The applicant will be notified of this in writing, along with information about submitting the necessary application materials. The comments from the Federal Resource Agencies to the Corps may be verbal initially, and must be made within 10 working days of the screening meeting. These comments must be confirmed in writing within 10 calendar days of the verbal response if the Resource Agency(ies) will request an individual permit. The Federal Resource Agency's comments must reflect a concern within their area of expertise, state the species or resources that could be impacted by the project, and describe the impacts that either individually or cumulatively will be more than minimal.

MINERALS MANAGEMENT SERVICE (MMS) REVIEW

For Category II projects which involve construction of solid fill structures or discharge of fills along the coast which may extend the coastline or baseline from which the territorial sea is measured, coordination between the Corps and Minerals Management Service (MMS), Continental Shelf (OCS) Survey Group, will be needed (pursuant to the Submerged Lands Act, 43 U.S.C., Section 1301-1315, 33 CFR 320.4(f). During the screening period, the Corps will forward project information to MMS for their review. MMS will coordinate their determination with the Department of the Interior (DOI) Solicitor's Office. The DOI will have 15 calendar days from the date MMS is in receipt of project information to determine if the baseline will be affected. No notification to the Corps within 15 day review period will constitute a "no affect" determination. Otherwise, the solicitor's notification to the Corps may be verbal but must be followed with a written confirmation within 10 business days from the date of the verbal notification. This procedure will be eliminated if the State of Maine provides a written waiver of interest in any increase in submerged lands caused by a change in the baseline resulting from solid fill structure or fills authorized under this general permit.

D. Corps Authorization: Category III (Individual Permit)

Work that is in the INDIVIDUAL PERMIT category on the attached DEFINITION OF CATEGORIES sheets, or that does not meet the terms and conditions of this general permit, will require an application for an individual permit from the Corps of Engineers (see 33 CFR Part 325.1). The screening procedures outlined above will only serve to delay project review in such cases. The applicant should submit the appropriate application materials (including the Corps application form) at the earliest possible date. General information and application forms can be obtained at (207) 623-8367 (Maine Field Office), (800) 343-4789, or (800) 362-4367 in Massachusetts. Individual water quality certification and coastal zone management consistency concurrence will be required from the State of Maine before Corps permit issuance.

E. Programmatic General Permit Conditions:

The following conditions apply to activities authorized under the PGP, including all Category I (non-reporting) and Category II (reporting – requiring screening) activities:

GENERAL REQUIREMENTS:

- 1. **Other Permits**. Authorization under this general permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.
- 2. Applicability of this general permit shall be evaluated with reference to Federal jurisdictional boundaries. Applicants are responsible for ensuring that the boundaries used satisfy the federal criteria defined at 33 CFR 328-329.
- 3. **Minimal Effects**. Projects authorized by this general permit shall have minimal individual and cumulative adverse environmental impacts as determined by the Corps.

4. **Discretionary Authority**. Notwithstanding compliance with the terms and conditions of this permit, the Corps of Engineers retains discretionary authority to require review for an individual permit based on concerns for the aquatic environment or for any other factor of the public interest. This authority is invoked on a case-by-case basis whenever the Corps determines that the potential consequences of the proposal warrant individual review based on the concerns stated above. This authority may be invoked for projects with cumulative environmental impacts that are more than minimal or if there is a special resource or concern associated with a particular project that is not already covered by the remaining conditions of the PGP and that warrants greater review.

Whenever the Corps notifies an applicant that an individual permit may be required, authorization under this general permit is void and no work may be conducted until the individual Corps permit is obtained or until the Corps notifies the applicant that further review has demonstrated that the work may proceed under this general permit.

5. **Single and Complete Projects**. This general permit shall not be used for piecemeal work and shall be applied to single and complete projects. All components of a single project and/or all planned phases of multi-phased projects shall be treated together as constituting one single and complete project (e.g., subdivisions should include all work such as roads, utilities, and lot development). This general permit shall not be used for any activity that is part of an overall project for which an individual permit is required.

NATIONAL CONCERNS:

- 6. **St. John/St. Croix Rivers**. This covers work within the Saint John and Saint Croix River basins that requires approval of the International Joint Commission. This includes any temporary or permanent use, obstruction or diversion of international boundary waters which could affect the natural flow or levels of waters on the Canadian side of the line, as well as any construction or maintenance of remedial works, protective works, dams, or other obstructions in waters downstream from boundary waters when the activity could raise the natural level of water on the Canadian side of the boundary.
- 7. **Historic Properties**. Any activity authorized by this general permit shall comply with Section 106 of the National Historic Preservation Act. Information on the location and existence of historic resources can be obtained from the Maine Historic Preservation Commission and the National Register of Historic Places. Federally recognized tribes (Penobscots, Passamaquoddys, Micmacs, and Maliseets) may know of the existence of other sites that may be of significance to their tribes. See page 14 for historic properties contacts.

Applicants with projects which will undergo the screening process (Category II) shall submit a copy of their application materials, with the name and address of the applicant clearly indicated, to the Maine Historic Preservation Commission, 55 Capitol Street, State House Station 65, Augusta, Maine 04333, and to the applicable tribe(s) to be reviewed for the presence of historic and/or archaeological resources in the permit area that may be affected by the proposed work. The Corps will then be notified by the Commission and/or

Tribe within 10 days if there are State and/or tribal concerns that the proposed work will have an effect on historic resources. The applicant should include with their application to the State or the Corps either a copy of their cover letter or a statement of having sent their application material to the Commission and Tribe(s).

If the permittee, either prior to construction or during construction of the work authorized herein, encounters a previously unidentified archaeological or other cultural resource, within the area subject to Department of the Army jurisdiction, that might be eligible for listing in the National Register of Historic Places, he/she shall stop work and immediately notify the District Engineer and the Maine Historic Preservation Commission and/or applicable Tribe(s).

- 8. **National Lands**. Activities authorized by this general permit shall not impinge upon the value of any National Wildlife Refuge, National Forest, or any area administered by the National Park Service.
- 9. **Endangered Species**. No activity is authorized under this general permit which
 - may affect a threatened or endangered species or a species proposed for such designation as identified under the Federal Endangered Species Act (ESA),
 - is likely to destroy or adversely modify the critical habitat or proposed critical habitat of such species,
 - would result in a 'take' of any threatened or endangered species of fish or wildlife, or
 - would result in any other violation of Section 9 of the ESA protecting threatened or endangered species of plants.

Applicants shall notify the Corps if any listed species or critical habitat, or proposed species or critical habitat, is in the vicinity of the project and shall not begin work until notified by the District Engineer that the requirements of the Endangered Species Act have been satisfied and that the activity is authorized. Information on the location of threatened and endangered species and their critical habitat can be obtained from the U.S. Fish and Wildlife Service and National Marine Fisheries Service (addresses attached, page 14).

10. **Essential Fish Habitat**. As part of the PGP screening process, the Corps will coordinate with the National Marine Fisheries Service (NMFS) in accordance with the 1996 amendments to the Magnuson-Stevens Fishery and Conservation Management Act to protect and conserve the habitat of marine, estuarine and anadromous finfish, mollusks, and crustaceans. This habitat is termed "essential fish habitat (EFH)", and is broadly defined to include "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." Applicants may be required to describe and identify potential impacts to EFH based upon the location of the project, the activity proposed, and the species present. Conservation recommendations made by NMFS will normally be included as a permit requirement by the Corps. Information on the location of EFH can be obtained from the NMFS regulations (50 CFR Part 600) (address listed on page 14) and on their web site (http://www.nero.nmfs.gov/ro/doc/webintro.html).

The EFH designation for Atlantic salmon includes all aquatic habitats in the watershed of the following rivers and streams, including all tributaries to the extent that they are currently or were historically accessible for salmon migration:

St. Croix River Pleasant River Union River Boyden River Narraguagus River Ducktrap River Dennys River Tunk Stream Sheepscot River Hobart Stream Patten Stream Kennebec River Aroostook River Orland River Androscoggin River East Machias River Penobscot River Presumpscot River

Machias River Passagassawaukeag River Saco River

- 11. Wild and Scenic Rivers. Any activity that occurs in a component of, or within 0.25 mile up or downstream of the main stem or tributaries of a river segment of the National Wild and Scenic River System, must be reviewed by the Corps under the procedures of Category II of this general permit regardless of size of impact. This condition applies to both designated wild and scenic rivers and rivers designated by Congress as study rivers for possible inclusion while such rivers are in an official study status. The Corps will consult with the National Park Service (NPS) with regard to potential impacts of the proposed work on the resource values of the Wild and Scenic River. The culmination of this coordination will be a determination by the NPS and the Corps that the work: (1) may proceed as proposed; (2) may proceed with recommended conditions; or (3) could pose a direct and adverse effect on the resource values of the river and an individual permit is required. If preapplication consultation between the applicant and the NPS has occurred whereby the NPS has made a determination that the proposed project is appropriate for authorization under this PGP (with respect to wild and scenic river issues), this determination should be furnished to the Corps with submission of the application. The address of the NPS can be found on Page 14 of this permit. National Wild/Scenic Rivers System (Designated River in Maine) as of 5/2/00: Allagash River beginning at Telos Dam continuing to Allagash checkpoint at Eliza Hole Rapids, approximately 3 miles upstream of the confluence with the St. John River. Length = 92 miles
- 12. **Federal Navigation Project**. Any structure or work that extends closer to the horizontal limits of any Corps navigation project than a distance of three times the project's authorized depth (see attached map following page 16 for locations of these projects) shall be subject to removal at the owner's expense prior to any future Corps dredging or the performance of periodic hydrographic surveys.
- 13. **Navigation**. There shall be no unreasonable interference with navigation by the existence or use of the activity authorized herein and no attempt shall be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the activity authorized herein.

The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure

or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

14. **Federal Liability.** In issuing this permit, the Federal Government does not assume any liability for the following: (a) damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes; (b) damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest; (c) damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit; (d) design or construction deficiencies associated with the permitted work; (e) damage claims associated with any future modification, suspension, or revocation of this permit.

MINIMIZATION OF ENVIRONMENTAL IMPACTS:

- 15. **Minimization**. Discharges of dredged or fill material into waters of the United States shall be avoided and minimized to the maximum extent practicable, regardless of review category.
- 16. **Work in Wetlands**. Heavy equipment working in wetlands shall be avoided if possible, and **if required, shall be placed on mats or other measures taken** to minimize soil and vegetation disturbance. Disturbed areas in wetlands shall be restored to preconstruction contours and conditions upon completion of the work.
- 17. **Temporary Fill**. Temporary fill in waters and wetlands authorized by this general permit (e.g., access roads, cofferdams) shall be properly stabilized during use to prevent erosion. Temporary fill in wetlands shall be placed on geotextile fabric laid on existing wetland grade. Temporary fills shall be disposed of at an upland site, suitably contained to prevent erosion and transport to a waterway or wetland. Temporary fill areas shall be restored to their approximate original contours but not higher. No temporary fill shall be placed in waters or wetlands unless specifically authorized by the Corps.
- 18. **Sedimentation and Erosion Control**. Adequate sedimentation and erosion control management measures, practices and devices, such as phased construction, vegetated filter strips, geotextile silt fences or other devices, shall be installed and properly maintained to reduce erosion and retain sediment on-site during and after construction. They shall be capable of preventing erosion, of collecting sediment, suspended and floating materials, and of filtering fine sediment. These devices shall be removed upon completion of work and the disturbed areas shall be stabilized. The sediment collected by these devices shall be removed and placed at an upland location in a manner that will prevent its later erosion into a waterway or wetland. All exposed soil and other fills shall be permanently stabilized at the earliest practicable date.

19. Waterway Crossings.

- (a) All temporary and permanent crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed to withstand and to prevent the restriction of high flows, to maintain existing low flows, and to not obstruct the movement of aquatic life indigenous to the waterbody beyond the actual duration of construction.
- (b) Temporary bridges, culverts, or cofferdams shall be used for equipment access across streams (NOTE: areas of fill and/or cofferdams must be included in total waterway/wetlands impacts to determine applicability of this general permit).
- (c) For projects that otherwise meet the terms of Category I, instream construction work shall be conducted during the low flow period July 15 October 1 in any year. Projects that are not to be conducted during that time period are ineligible for Category I and shall be screened pursuant to Category II, regardless of the waterway and wetland fill and/or impact area.
- 20. **Discharge of Pollutants**. All activities involving any discharge of pollutants into waters of the United States authorized under this general permit shall be consistent with applicable water quality standards, effluent limitations, standards of performance, prohibitions, and pretreatment standards and management practices established pursuant to the Clean Water Act (33 U.S.C. 1251) and applicable state and local laws. If applicable water quality standards, limitations, etc., are revised or modified during the term of this permit, the authorized work shall be modified to conform with these standards within six months of the effective date of such revision or modification, or within a longer period of time deemed reasonable by the District Engineer in consultation with the Regional Administrator of the Environmental Protection Agency. Applicants may presume that state water quality standards are met with issuance of the 401 Water Quality Certification.
- 21. **Spawning Areas**. Discharges into known 1) fish and shellfish spawning or nursery areas; and 2) amphibian and waterfowl breeding areas, during spawning or breeding seasons shall be avoided, and impacts to these areas shall be avoided or minimized to the maximum extent practicable during all times of year.
- 22. **Storage of Seasonal Structures**. Coastal structures such as pier sections and floats that are removed from the waterway for a portion of the year shall be stored in an upland location located above mean high water and not in tidal marsh.
- 23. **Environmental Values**. The permittee shall make every reasonable effort to carry out the construction or operation of the work authorized herein in a manner so as to maintain as much as is practicable, and to minimize any adverse impacts on, existing fish and wildlife and natural environmental values.
- 24. **Protection of Vernal Pools.** Impacts to uplands in proximity (within 500 feet) to the vernal pools referenced in DEFINITIONS OF CATEGORIES shall be minimized to the maximum extent possible.

PROCEDURAL CONDITIONS:

- 25. **Cranberry Development Projects.** For Cranberry development projects authorized under the PGP, the following conditions apply:
 - 1. If a cranberry bog is abandoned for any reason, the area must be allowed to convert to natural wetlands unless an individual permit is obtained from the Corps of Engineers allowing the discharge of fill for an alternate use.
 - 2. No stream diversion shall be allowed under this permit.
 - 3. No impoundment of perennial streams shall be allowed under this permit.
 - 4. The project shall be designed and constructed to not cause flood damage on adjacent properties.
- 26. Inspections. The permittee shall permit the District Engineer or his authorized representative(s) to make periodic inspections at any time deemed necessary in order to ensure that the work is being performed in accordance with the terms and conditions of this permit. The District Engineer may also require post-construction engineering drawings for completed work, and post-dredging survey drawings for any dredging work. To facilitate these inspections, the attached work notification form should be filled out and returned to the Corps for all Category II projects.
- 27. **Maintenance**. The permittee shall maintain the work or structures authorized herein in good condition, including maintenance, to ensure public safety. Dredging projects: note that this does not include maintenance of dredging projects. Maintenance dredging is subject to the review thresholds described on the attached DEFINITION OF CATEGORIES sheets and/or any conditions included in a written Corps authorization.
- 28. **Property Rights**. This permit does not convey any property rights, either in real estate or material, or any exclusive privileges, nor does it authorize any injury to property or invasion of rights or any infringement of federal, state, or local laws or regulations. If property associated with work authorized by the PGP is sold, the PGP authorization is automatically transferred to the new property owner. The new property owner should provide this information to the Corps in writing. No acknowledgement from the Corps is necessary.
- 29. **Modification, Suspension, and Revocation** This permit may be either modified, suspended, or revoked, in whole or in part, pursuant to the policies and procedures of 33 CFR 325.7 and any such action shall not be the basis for any claim for damages against the United States.
- 30. **Restoration** The permittee, upon receipt of a notice of revocation of authorization under this permit, shall restore the wetland or waterway to its former condition without expense to the United States and as directed by the Secretary of the Army or his authorized representative. If the permittee fails to comply with such a directive, the Secretary or his designee may restore the wetland or waterway to its former condition, by contract or otherwise, and recover the cost from the permittee.

- 31. **Special Conditions**. The Corps, independently or at the request of the Federal Resource Agencies, may impose other special conditions on a project authorized pursuant to this general permit that are determined necessary to minimize adverse environmental effects or based on any other factor of the public interest. Failure to comply with all conditions of the authorization, including special conditions, will constitute a permit violation and may subject the permittee to criminal, civil, or administrative penalties or restoration.
- 32. **False or Incomplete Information**. If the Corps makes a determination regarding the eligibility of a project under this permit and subsequently discovers that it has relied on false, incomplete, or inaccurate information provided by the permittee, the permit shall not be valid and the government may institute appropriate legal proceedings.
- 33. **Abandonment**. If the permittee decides to abandon the activity authorized under this general permit, unless such abandonment is merely the transfer of property to a third party, he/she must restore the area to the satisfaction of the District Engineer.
- 34. **Enforcement cases**. This general permit does not apply to any existing or proposed activity in Corps jurisdiction associated with an on-going Corps of Engineers or Environmental Protection Agency enforcement action until such time as the enforcement action is resolved or the Corps determines that the activity may proceed independently without compromising the enforcement action. The Corps may choose not to accept applications or issue permits to any applicant with outstanding violations.
- 35. **Emergency situations.** This PGP can be used to authorize the repair, rehabilitation, or replacement of those structures destroyed by storms, floods, fire or other discrete unexpected and catastrophic event. In such situations and if the work exceeds Category I limitations, if applicant applies to the Corps within 30 days of the event, the Corps will attempt to contact the resource agencies for their approvals but, if unable to contact them, will issue an emergency permit and review them after-the-fact with the agencies at the next joint processing meeting. Proposed work submitted more than 30 days after the emergency will go through the standard PGP procedures.

DURATION OF AUTHORIZATION/GRANDFATHERING:

36. **Duration of Authorization** Activities authorized under this general permit that have commenced (i.e., are under construction) or are under contract to commence in reliance upon this authorization will remain authorized provided the activity is completed within twelve months of the date of the general permit's expiration, modification, or revocation, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend, or revoke the authorization in accordance with 33 CFR 325.2 (e)(2). Activities completed under the authorization of the general permit that was in effect at the time the activity was completed will continue to be authorized by the general permit.

37. Previously Authorized Activities.

- (a) Activities which have commenced (i.e., are under construction or are under contract to commence) prior to the issuance date of this general permit, in reliance upon the terms and conditions of the non-reporting category of the previous Maine PGP shall remain authorized provided the activity is completed within twelve months of the date of issuance of this general permit, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend, or revoke the authorization in accordance with special condition 4. The applicant must be able to document to the Corps satisfaction that the project was under construction or contract by the appropriate date.
- (b) Projects that have received written verification or approval from the Corps, based on applications made to the Corps prior to issuance of this general permit, for the previous Maine SPGP and PGP, Nationwide permits, regional general permits, or letters of permission shall remain authorized as specified in each authorization.
- (c) This general permit does not affect activities authorized pursuant to 33 CFR Part 330.3 (activities occurring before certain dates).

{PRIVATE}DISTRICT	DATE
ENGINEER	

CONTACTS FOR MAINE PROGRAMMATIC GENERAL PERMIT:

U.S. Army Corps of Engineers
Maine Project Office
675 Western Avenue #3
Manchester, Maine 04351
207-623-8367
Fax # 207-623-8206

Federal Endangered Species
U.S. Fish and Wildlife Service
Maine Field Office
1033 South Main Street
Old Town, Maine 04468
207-827-5938
Fax # 207-827-6099

Wild and Scenic Rivers
National Park Service
North Atlantic Region
15 State Street
Boston, MA 02109
617-223-5203

Maine Historic Preservation Commission 55 Capitol Street State House Station 65 Augusta, Maine 04333 207-287-2132 Fax # 207-287-2335

Aroostook Band of Micmacs
P.O. Box 772
Presque Isle, Maine 04769
207-764-1972
Fax # 207-764-7667

Passamaquoddy Tribe of Indians Pleasant Point Reservation Attn: Tribal Council P.O. Box 343 Perry, Maine 04667 207-853-2600 Fax # 207-853-6039 Federal Endangered Species and Essential Fish Habitat
National Marine Fisheries Service
One Blackburn Drive
Gloucester, Massachusetts 01939
978-281-9102
Fax # 978-281-9301

Houlton Band of Maliseet Indians
Attn: Brenda Commander, Tribal Chief
Route 3 – Box 450
Houlton, Maine 04730
207-532-4273
Fax # 207-532-2660

Passamaquoddy Tribe of Indians
Indian Township Reservation
Attn: Donald Soctomah
P.O. Box 301
Princeton, Maine 04668
207-796-2301
Fax # 207-796-5256

Penobscot Indian Nation Richard Hamilton, Chief 6 River Road Indian Island Reservation Old Town, Maine 04468 (207) 827-7776 Fax # 207-827-1137

Maine Department of Environmental Protection (For State Permits and Water Quality Certifications)

Natural Resources Division Bureau of Land and Water Quality Control State House Station 17 Augusta, Maine 04333 207-287-2111

Eastern Maine Regional Office 106 Hogan Road Bangor, Maine 04401 207-941-4570

Maine Land Use Regulation Commission (LURC) offices

22 State House Station
Augusta, ME 04333-0022
207-287-2631
800-452-8711 (call to obtain appropriate LURC office)
Fax # 207-287-7439

Lakeview Drive P.O. Box 1107 Greenville, ME 04441 207-695-2466 Fax # 207-695-2380

(For CZM Determinations)
State Planning Office
Coastal Program
184 State Street
State House Station 38
Augusta, Maine 04333
207-287-1009

(For Submerged Lands Leases)
Maine Department of Conservation
Bureau of Parks and Lands
22 State House Station
207-287-3061

Southern Maine Regional Office 312 Canco Road Portland, Maine 04103 201-822-6300

Northern Maine Regional Office 1235 Central Drive Skyway Park Presque Isle, Maine 04769 207-764-0477

45 Radar Road Ashland, ME 04732-3600 207-435-7963 Fax # 207-435-7184

191 Main Street East Millinocket, ME 04430 207-746-2244 Fax # 207-746-2243

Maine Department of Marine Resources (For Aquaculture Leases) McKown Point Boothbay Harbor, Maine 04575 207-633-9500

A. INLAND WETLANDS (WATERS OF THE U.S.) ¹	CATEGORY I	CATEGORY II	INDIVIDUAL PERMIT
(a) NEW FILL/	Less than 4,300 sfinland waterway and/or	4,300 sf to 3 acres inland waterway	Greater than 3 acres inland
EXCAVATION DISCHARGES	wetland fill and secondary impacts (e.g., areas drained, flooded or cleared).	and/or wetland fill and secondary impacts (e.g., areas drained, flooded or cleared).	waterway and/or wetland fill and secondary impacts (e.g., areas
	Includes projects covered by a State Tier	Impact area includes all temporary and	drained, flooded or cleared).
	One permit with no cumulative impacts over	permanent fill and excavation discharges	Impact area includes all
	15,000 sf in inland wetlands from previous	except for incidental fallback.	temporary and permanent fill and
	permits, unauthorized work, and/or other	Includes in-stream work, including	excavation discharges except for
	state permits.	crossings (other than spanned crossing as	incidental fallback ⁵ .
	Includes crossing of perennial waterways	described in Category I) with any	
	designated as Essential Fish Habitat (EFH)	discharge of fill below ordinary high	In-stream work exceeding
	for Atlantic salmon ² if the waterway is	water in perennial waterways designated	Category II limits.
	crossed with a span and footprints of the	as EFH for Atlantic salmon ² .	
	span abutments are outside ordinary high	Time of year restrictions determined	If EIS required by the Corps.
	water with no more than 4,300 sf of	case-by-case.	
	associated wetland impact.		
	Includes in-stream work of up to 4,300 sf		
	of fill below ordinary high water in		
	waterways not designated as EFH for		
	Atlantic salmon ² and performed in		
	accordance with Maine Permit By Rule		
	standards or a LURC permit.		

Waters of the U.S. in inland areas: inland rivers, streams, lakes, ponds and wetlands.

The larger the impacts, the more likely an individual permit will be required. Projects involving widening, expansion or impacts to degraded or low valuewetlands between 1-3 acres may be approved under Category II, subject to the Federal screening. The Corps recognizes and endorses the DEP Tier 2 upper thresholds of 1 acre. Compensatory mitigation is likely to be required at this level of impact.

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² Essential Fish Habitat for Atlantic salmon includes all aquatic habitats in the watersheds of the following rivers and streams, including all tributaries to the extent Pleasant, Narraguagus, Tunk Stream, Patten Stream, Orland, Penobscot, Passagassawaukeag, Union, Ducktrap, Sheepscot, Kennebec, Androscoggin, Presumpscot, that they are currently or were historically accessible for salmon migration: St. Croix, Boyden, Dennys, Hobart Stream, Aroostook, East Machias, Machias, and Saco River.

	CATEGORY I	CATEGORY II	INDIVIDUAL PERMIT
(a) NEW FILL/ EXCAVATION DISCHARGES (continued)	Impact area includes all temporary and permanent fill and excavation discharges except for incidental fallback. In-stream work limited to July 15-Oct. 1. This category excludes situations when a vernal pool of any size may be impacted, in accordance with the ME DEP definition of vernal pool ⁴ . This category excludes work within ¹ / ₄ mile of a Wild and Scenic River ⁵ . This category excludes dams, dikes, or activities involving water withdrawal or water diversion. This category excludes work in National Wildlife Refuges.	Proactive restoration projects with any amount of impact can be reviewed under Category II. The Corps, in consultation with State and Federal agencies, must determine that net adverse effects are not more than minimal.	
(b) BANK STABILIZATION PROJECTS	Inland bank stabilization less than 500 ft. long and less than 1 cy fill per linear foot below ordinary high water in ponds, lakes, and waterways not designated as EFH for Atlantic Salmon ² , provided there is no wetland fill. In-stream work limited to July 15-October 1.	Inland bank stabilization in ponds, lakes, and waterways not designated as EFH for Atlantic salmon² which exceeds Category I limitsInland bank stabilization of any size below ordinary high water in waterways designed as EFH for Atlantic salmon²Other stabilization exceeding Category I.	J. 1.20.
(c) REPAIK AND MAINTENANCE OF AUTHORIZED FILLS	Kepair or maintenance of existing, currently serviceable, authorized fills with no substantial expansion or change in use.	Replacement of non-serviceable fills, or repair or maintenance of serviceable fills with expansion of any amount up to 1 acre, or with a change in use.	Keplacement of non-serviceable fills, or repair or maintenance of serviceable fills with greater than 1 acre of expansion.

Vernal pools provide the primary breeding habitat for wood frogs, spotted salamanders, blue-spotted salamanders, and fairy shrimp, and provide habitat for other shallow depressions that fill during the spring and fall and may dry during the summer. Vernal pools have no permanent or viable populations of predatory fish. ⁴ Vernal Pool: Naturally-occurring, or intentionally created for the purposes of compensatory mitigation, temporary to permanent bodies of water occurring in wildlife including several endangered and threatened species.

⁵ National Wild/Scenic Rivers System (Designated River in Maine): Allagash River beginning at Telos Dam continuing to Allagash checkpoint at Eliza Hole Rapids, approximately 3 miles upstream of the confluence with the St. John River. Length = 92 miles

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B. TIDAL WATERS AND NAVIGABLE WATERS ⁶	CATEGORY I	CATEGORY II	INDIVIDUAL PERMIT
(a) FILL		Up to 1 acre waterway or wetland fill and secondary impacts (e.g., areas drained, flooded or cleared). Includes temporary and permanent waterway fill. Temporary tidal marsh impacts up to 1 acre. Permanent tidal marsh, mudflat, or vegetated shallows ⁷ fill up to 1,000 sf. Proactive restoration projects with any amount of impact can be reviewed under Cat. II. The Corps, in consultation with State and Federal agencies, must determine that net adverse effects are not more than minimal.	Greater than 1 acre waterway fill and secondary impacts (e.g., areas drained, flooded or cleared). Includes temporary and permanent waterway fillTemporary tidal marsh impacts over 1 acrePermanent tidal marsh, mudflat, or vegetated shallows ⁶ fill over 1,000 sf.
(b) REPAIR AND MAINTENANCE WORK	Repair or maintenance of existing, currently serviceable, authorized structure or fill with no substantial expansion or change in use. Work must be in same footprint as original structure or fill.	Repair or replacement of any non-serviceable structure or fill, or repair or maintenance of serviceable fills, with expansion of any amount up to 1 acre, or with a change in use.	Replacement of non-serviceable structures or fill or repair or maintenance of serviceable structures or fill with expansion greater than 1 acre.

⁶ Navigable Waters: waters that are subject to the ebb and flow of the tide and Federally designated navigable waters (Penobscott River to Medway, Kennebec River to Moosehead Lake, and the portion of Umbagog Lake in Maine).

⁷ Vegetated Shallows: subtidal areas that support rooted aquatic vegetation such as eelgrass.

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	CATEGORY I	CATEGORY II	INDIVIDUAL PERMIT
(c) DREDGING	Maintenance dredging of less than 1,000 cy maintenance dredging of greater than 1,000 cy in but between litted to work between November 1 and January 15 cabove mean high water), only if material is determined suitable.	Maintenance dredging of greater than 1,000 cy, new dredging of up to 25,000 cy, or projects that do not meet Category I. Disposal includes upland, open water or beach nourishment (above mean high water), only if material is determined suitable.	Maintenance dredging (any amount) in or affecting special aquatic sites?. See B(a) above for dredge disposal in wetlands or waters. New dredging greater than 25,000 cy or any amount in or affecting special aquatic sites?
(d) MOORINGS	Private, non-commercial, non-rental single boat moorings not associated with any boating facility provided not located in a Federal Navigation Project, there is no interference with navigation, it is not located in vegetated shallows ⁶ , and it is within ½ mile of the owner's residence or a public access point ¹⁰ Minor relocation of previously authorized moorings and moored floats consistent with Harbormaster recommendations, provided it is also consistent with local regulations, is not located in vegetated shallows, and does not interfere with navigation.	Moorings that do not meet the terms of Category I (e.g., rental or service moorings) and moorings that meet the terms of Category I that are located in a Federal anchorage.	Moorings within the horizontal limits, or with moored vessels that extend, into the horizontal limits of a Federal Navigation Project, except those in Federal anchorages under Category II.

⁸ Special Aquatic Sites: include wetlands and salt marsh, mudflats, riffles and pools, and vegetated shallows.

⁹ Boating Facilities: facilities that provide, rent, or sell mooring space, such as marinas, yacht, clubs, boat clubs, boat yards, town facilities, dockominiums, etc.

¹⁰ Cannot be at a remote location to create a convenient transient anchorage.

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	CATEGORY I	CATEGORY II	INDIVIDUAL PERMIT
(e) PILE- SUPPORTED STRUCTURES AND FLOATS	Reconfiguration of existing authorized docks, provided structures are not positioned over vegetated shallows ⁶ or salt marsh and provided floats are supported off substrate at low tide. No dredging, additional slips or expansion allowed.	Private piers and floats for navigational access to waterway (seasonal and permanent).	Structures, piers or floats that extend, or with docked/moored vessels that extend, into the horizontal limits of a Federal Navigation Project. Structures, including piers and floats, associated with a new or previously unauthorized boating facility.
MISCELLANEOUS	Temporary buoys, markers, floats, etc., for recreational use during specific events, provided they are removed within 30 days after use is discontinued. Coast Guard approved aids to navigation. Oil spill clean-up temporary structures or fill. Fish/wildlife harvesting structures/fill (as defined by 33 CFR 330, App. A-4) Scientific measurement devices and survey activities such as exploratory drilling, surveying or sampling. Shellfish seeding (brushing the flats) projects Does not include oil or gas exploration and fills for roads or construction pads. This category excludes work in National Wildlife Refuges.	Structures or work in or affecting tidal or navigable waters that are not defined under any of the previous headings. Includes, but is not limited to, utility lines, aerial transmission lines, pipelines, outfalls, boat ramps, bridge fills/abutments, etcShellfish/finfish (other than Atlantic salmon), or other aquaculture facilities which are consistent with the Corps revised standard siting requirements and standard permit conditions dated 7/6/94, or as revised.	If EIS required by Corps.

The Brushing the flats: the placement of tree boughs, wooden lath structures, or small-mesh fencing on mudflats for the purpose of enhancing recruitment of softshell clams (Mya arenaria).

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WORK START NOTIFICATION FORM

(Minimum Notice: Two Weeks before Work Begins)

MAIL TO: U.S. Army Corps of Engineers, New England District

Regulatory Branch

Policy Analysis/Technical Support Section

696 Virginia Road

Concord, Massachusetts 01742-2751

permittee to	was issued to the permittee. The permit authorized the
PLEASE PRINT OR TYPE	
Business Address:	
Telephone Number: () Proposed Work Dates: Start:	
PERMITTEE'S SIGNATURE:	DATE:
PRINTED NAME:	TITLE:
FOR USE BY THE CORPS OF ENGINEERS	
PM:	Submittals Required:
Inspection Recommendation:	

(Minimum Notice: Two Weeks Before Mitigation Work Begins) *********************************** U.S Army Corps of Engineers, New England District MAIL TO: Regulatory Branch Policy Analysis/Technical Support Section 696 Virginia Road Concord, Massachusetts 01742-2751 ************************* Corps of Engineers Permit No. () was issued to [insert name of permittee]. The permit authorized the permittee to [insert brief description of the authorized work and location]. The permit required compensatory mitigation. [Briefly describe the requirements, including, if applicable, submitting a final mitigation plan and monitoring reports.] Those listed below will do the mitigation, including monitoring and remediation if required. They understand the requirements of the permit and the mitigation and monitoring plan. PLEASE PRINT OR TYPE Environmental Mitigation Consultant/Scientist Contractor Name of Person/Firm: **Business Address:** Telephone Number: ()_____ ()____ Proposed Mitigation Work Dates: Start _____ Finish_ PERMITTEE'S SIGNATURE: DATE: PRINTED NAME: _____ TITLE: ____

Corps PMs:

MITIGATION WORK-START NOTIFICATION FORM